

SOROTAN DARAT 31



JURNAL TENTERA DARAT MALAYSIA



KANDUNGAN

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MASALAH KOR INFANTRI DALAM MENGHADAPI ABAD KE-21 - TEORI PERUBAHAN

oleh :

Lt Kol Mohd. Nasir bin Abdul Rahman

SINOPSIS

Profesionalisme merupakan sebuah institusi yang mempunyai sebuah kehidupan yang lengkap dengan ciri budaya dan etikanya yang tersendiri. Semangat, ketaatan, kesetiaan, dedikasi, komitmen, setiakawan adalah antara beberapa unsur yang menjadi sebahagian keperluan penting dalam menentukan halatuju sesebuah ketumbukan ketenteraan. Kor Infanteri sering dijadikan model untuk mengukur tahap siap siaga dan disiplin sesuatu pasukan seperti Tentera Darat Malaysia. Kor Infanteri yang lemah akan mencerminkan kelesuan Tentera Darat secara keseluruhannya dan begitulah sebaliknya. Keunikan kerjaya tentera sebagai sebuah institusi boleh dirumuskan melalui kata-kata Presiden Amerika Syarikat yang pertama, George Washington yang menyatakan:

"The Army is an institution, not an occupation. Members take an oath of service to the nation and the Army, rather than simply accept a job. As an institution, the Army has moral and ethical obligations to those who serve the nation and their families"

(George Washington, 1778)¹

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Major Mohd Nasir bin Abdul Rahman : *The Standard of Professionalism in Malaysian Armed Forces - An Analysis* Kertas Komandan 1992, MTAT, ms 1.

PENDAHULUAN

Dalam kita melangkah ke arah kedinamikan abad ke-21, kita perlu mendalami kefahaman tentang teori perubahan sumber manusia yang akan turut berjuang menentang arus cabaran yang mendatang. Sering juga kita dengar ungkapan yang mengatakan 'Tentera Darat bukan tempatnya untuk makan gaji, *'welfare organization'* atau hanya untuk mementingkan diri sendiri'. Apakah ungkapan seperti ini menunjukkan bahawa Tentera Darat kini menjadi semata-mata sesuatu pekerjaan atau sebaliknya.

Bertitik tolak daripada persoalan di atas, artikel ini secara khususnya akan menyentuh tentang perubahan yang dialami oleh anggota Kor Infantri. Artikel ini juga akan membentangkan persoalan sama ada kerjaya dalam Kor Infantri masih dianggap sebagai sebuah institusi (*institution*) atau semata-mata suatu pekerjaan (*occupation*). Kefahaman terhadap Teori Perubahan (*Theory of Change*) ini akan menjadi titik tolak untuk kita menghasilkan program tindakan yang efektif dalam menangani permasalahan Kor Infantri masakini. Sekaligus ia akan memastikan anggota Infantri terus unggul dan tidak dianggap '*endangered species*'. Tidak akan bermakna segala dasar dan peraturan yang dikeluarkan jika kita tidak benar-benar memahami akar umbi permasalahan yang timbul. Artikel ini diharap akan dapat dijadikan landasan asas untuk tindakan susulan.

Metodologi artikel ini telah menggunakan pendekatan pemerhatian dan wawancara rambang dengan mereka yang terlibat secara langsung dan tidak langsung dalam aspek pengurusan sumber manusia. Penekanan adalah terhadap beberapa petunjuk sosial dan seterusnya menganalisa maklumat yang diperolehi dan membandingkannya dengan Teori Perubahan.

KEADAAN SEMASA

Kor Infantri merupakan kor yang terbesar dan sebagai angkatan teras dalam Tentera Darat Malaysia. Walaupun ia telah dan akan terus mengalami perubahan dari aspek sistem persenjataan dan peralatan yang lebih

canggih, peranan Kor Infantri akan terus kekal; mencari, merapati, membunuh atau menawan musuh; menawan dan menduduki tempat atau tanah; menangkis sebarang serangan sama ada pada waktu siang atau malam dalam apa jua musim, cuaca dan rupa muka bumi sekalipun. Biasanya ia dilihat sebagai contoh kor-kor lain serta perkhidmatan dalam Angkatan Tentera Malaysia. Imej serta tahap profesionalisma yang tinggi sentiasa dihormati oleh semua. Anggota-anggota infantri yang dipandang sebagai unik dengan identitinya yang tersendiri sama ada dari segi fizikal mahupun mental meletakkannya sebagai '*the main fighting force*' atau teraju utama dalam sistem pertahanan negara. Sebagaimana dinyatakan oleh Field Marshall Lord Wavell:²

"All battle and all wars are won in the end by the infantrymen. The infantry always bears the brunt, his casualties are heavier, he suffers greater extremes of discomfort and fatigue than other arms. The art of the infantryman is less stereotyped and far harder to acquire than that of any other arms".

Tahap profesionalisma anggota infantri telah terbukti dalam berbagai pertempuran dan peperangan yang berlaku selama ini. Dalam konteks negara kita, komitmen dan dedikasi yang dipamerkan dalam menangani Peperangan Dunia ke Dua, Darurat, Konfrontasi, operasi-operasi menentang pengganasan komunis, operasi Pertubuhan Bangsa-Bangsa Bersatu (PBB) serta operasi bersama Tentera '*North Atlantic Treaty Organisation (NATO)*', membuktikan keunggulan Kor Infantri. Era pasca perletakan senjata Parti Komunis Malaya dan Parti Komunis Kalimantan Utara meletakkan Kor Infantri dalam landasan anjakan paradigma yang merubah halatujunya. Langkah menuju era peperangan konvensional yang serba canggih mencorak teori perubahan yang harus dilalui oleh anggota infantri. Dalam keadaan aman ketika ini, anggota infantri dilihat dari segi ketrampilan, sikap dan dedikasi terhadap tugas harian mereka sama ada dalam pangkalan mahupun ketika melakukan latihan-latihan

di medan.

Kor Infantri kini bukan sahaja menghadapi masalah untuk menarik minat remaja memasuki profesion tersebut tetapi juga mengalami masalah untuk mengekalkan anggota yang sedia ada. Beberapa punca berlakunya perkara ini telah dikenalpasti antaranya ialah skim perkhidmatan serta gaji dan ganjaran yang kurang menarik berbanding dengan sektor swasta³. Terdapat sejumlah anggota telah memohon sama ada untuk berhenti, bersara awal atau bertukar kor. Keadaan ini sesungguhnya telah memberi tamparan yang hebat kepada Kor Infantri. Kekurangan anggota bererti Kor Infantri mempunyai pilihan yang terhad dalam memilih anggota yang benar-benar berkelayakan untuk mengendali sistem persenjataan dan peralatan yang lebih canggih pada masa akan datang. Minat terhadap penyertaan dalam Kor Infantri boleh dirumuskan dalam Jadual⁴ berikut:

Bil.	Sebab Masuk Infantri	Jumlah Responden	Peratus (%)
(a)	(b)	(c)	(d)
1.	Sukarela (pilihan)	467	48.05
2.	Terpaksa	505	51.95

Jadual 1

Anggota Kor Infantri telah dikatakan sebagai satu pasukan yang berkebolehan dan mampu melaksanakan apa jua tugas dengan cemerlang. Ungkapan ini kurang tepat masa kini kerana terdapat beberapa petunjuk yang dapat merumuskan bahawa warga Kor Infantri kini tidak mengambil berat faktor prestasi yang baik. Sebagai contoh; kursus yang dihadiri oleh anggota infantri menunjukkan keputusan yang kurang memuaskan. Pencapaian dalam Lembaga Kenaikan Pangkat juga jelas membuktikan bahawa

terdapat anggota yang tidak berusaha untuk meningkatkan tahap pengetahuannya. Keadaan ini juga mungkin dirasakan oleh anggota dalam kor-kor lain.

Rungutan yang biasa disuarakan oleh pegawai kanan tentera masa kini adalah tahap profesionalisma anggota infantri pada keseluruhannya sedang menurun. Pengarah Infantri pernah menyuarakan dalam pelbagai situasi yang anggota infantri kini kurang mengambil berat terhadap perkara-perkara yang asas (*basic soldiering*). Akibatnya mereka menjadi kelompok yang kurang prihatin dan lebih banyak mempersoalkan sesuatu tugas daripada memikirkan bagaimana cara terbaik melakukan tugas tersebut. Di samping itu, mereka gagal menggunakan pengetahuan yang diterima dari kursus-kursus yang dihadiri dan ini menjadikan mereka bersifat reaktif daripada proaktif.

TEORI PERUBAHAN

Am. Teori Perubahan merupakan satu gagasan yang menerangkan mengapa tingkahlaku individu menjadi sedemikian rupa. Ia menggariskan beberapa panduan sebagai asas analisa untuk memahami trend dan halatuju sesebuah pasukan. Kefahaman ini adalah penting kerana akan membantu pemerintah mengolah satu program tindakan yang bersepadu dan berkesan untuk membawa anggotanya menuju matlamat yang telah ditetapkan. Sebagai asas kepada perbincangan artikel ini, berikut diperturunkan takrif institusi dan pekerjaan. Kefahaman terhadap aspek ini akan mencernakan program tindakan Kor Infantri menghadapi cabaran di abad ke-21.

* Institusi (*Institution*).

- Berdasarkan definisi Moskos, ... 'is legitimised in terms of values and norms: that is, a purpose transcending individuals' self-interest in favour of a presumed higher good... Members of an institution are often viewed of following a calling'.⁵ Pewujudan kerjaya

³ Panglima Tentera Darat, *The Malaysian Army-Roles, Concept and Capabilities*; Ucapan kepada penuntut MTAT pada 17 Okt 96.

⁴ Jadual ini diambil dari hasil kajian Jabatanarah Infantri terhadap paras motivasi anggota Kor Infantri pada tahun 1991.

⁵ The Military Profession : Theories of Change : Giuseppe Caforio. *Armed Forces and Society*, Vol. 15 No. 1, Fall 1988, ms 56.

ketenteraan sebagai institusi diperkuatkan dengan kata-kata Huntington bahawa profesion ketenteraan ini memerlukan seseorang yang profesional.⁶ Seterusnya beliau menerangkan bahawa profesionalisma itu memerlukan ciri-ciri *expertise*, *responsibility* dan *corporateness*. Beliau juga menyatakan:

"The phrases 'professional army' and 'professional soldier' have obscured the difference between the career enlisted man who is professional in the sense of one who work for monetary gain and the career officer who is professional in the very difference sense of one who pursues a 'higher calling' in the service of society'."

- Menurut Ahli Psikologi, Robert M. Mac Iver dan Charles H. Page bahawa institusi adalah *'The establishment form or procedures of a group activity and/or association, which they defined as a group organised to pursue one or more interest'*.⁸

- Dalam ertikata lain, institusi adalah suatu pertubuhan yang mempunyai budaya dan amalan yang kukuh dalam mencapai matlamat. Dalam konteks Kor Infantri, institusi merupakan sesuatu yang amat perlu dikekalkan kerana sifat penugasan anggota infantri sendiri memerlukan kesetiaan, ketaatan, semangat setia kawan, semangat perjuangan yang kental dan sebagainya. Ini juga sesuai dengan cogan kata 'TAAT SETIA' dan 'AGI IDUP AGI NGELABAN'.

- Oleh kerana sifat organisasi

ketenteraan itu adalah ke arah pembentukan sebuah ketumbukan yang sentiasa bersedia untuk bertempur, ia menagih anggotanya supaya mempunyai etika ketenteraan yang jitu dan yang hanya akan subur jika individu tersebut menganggap profesion ketenteraan sebagai sebuah institusi. Justeru tugas yang berat itu tidak mungkin dapat dipikul oleh sembarangan orang yang terdiri daripada pekerja biasa. Etika⁹ tersebut adalah seperti berikut:

- ◆ *'Loyalty to the ideals of the nation.'*
- ◆ *'Loyalty to the soldier and the organisation.'*
- ◆ *'Personal responsibility.'*
- ◆ *'Selfless service.'*

* **Pekerjaan (Occupation).**

- Manakala pekerjaan yang ditakrifkan oleh Moskos adalah *'is legitimised in terms of marketplace, that is prevailing monetary rewards for equivalent competencies The occupational model implies a priority of self-interest rather than of the employing organisation'*.¹⁰ Graham pula mentafsirkan *'work'* (occupation) sebagai *'an activity which is directed by others as regards purpose, methods, materials, time and space. Its usual aim is to contribute towards the production of goods and services. Work is concerned with things that others require and willing to pay more'*.¹¹

- Secara ringkasnya, ianya bermakna sesuatu yang dibuat untuk keperluan hidup. Sekiranya anggapan terhadap Kor Infantri itu sebagai pertubuhan yang

Bagi mereka yang menganggap profesion ketenteraan itu sebagai pekerjaan, ganjaran yang diharapkan adalah bersifat material iaitu pulangan dalam bentuk wang ringgit. Kini kenaikan pangkat dan kekananan sering dipersoalkan oleh anggota.

6 The Associates, Office of Military Leadership : *A Study of Organisational*. Stackpole books, 1976, ms 523.

7 Ibid.

8 The new encyclopedia Britanica. University of Chicago, 1975.

9 Major Abdullah bin Dolmat : *The Strength and Weaknesses of the Present Structure in the Army; the Road to Reform*. MTAT, 1986, ms 8.

10 Lihat nota 6 : Ibid.

11 H T Graham and R Bennett : *Human Resources Management*, Longman Group UK, 1992, ms 21.

menawarkan pekerjaan menjadi suatu fenomena di kalangan anggota infantri, maka satu ketika nanti kita dapati bahawa tiada siapa yang akan menyertai Kor Infantri. Kajian telah menunjukkan wujudnya masalah untuk mendapatkan anggota yang berkualiti tinggi kerana adanya persaingan antara sektor awam dan swasta.¹² Bagi mereka yang telah menganggotai Kor Infantri akan berusaha untuk keluar dari organisasi tersebut. Anggota tentera dengan pengalaman dan kemahiran yang ada sememangnya masih laris dalam sektor swasta.¹³ Kajian yang dibuat oleh Kor Polis Tentera menunjukkan terdapat anggota tentera yang sanggup bekerja sebagai penjaja pasar malam, pembawa teksi dan sebagainya untuk tujuan mendapat ganjaran yang lebih.¹⁴ Tentulah

kita dapat menjangkakan apa akan terjadi kepada kewibawaan Kor Infantri sekiranya fenomena tersebut tidak dibendung hingga ke akar umbi.

I/O Model. Salah satu model Teori Perubahan telah dipelopori oleh Charles Moskos¹⁵. Beliau berpendapat bahawa sikap anggota tentera terhadap organisasi kini telah berubah. Pandangan beliau berasaskan suatu model yang dikenali sebagai *institutional and occupational model* (I/O Model). Beliau telah menggunakan beberapa petunjuk seperti Jadual¹⁶ berikut sebagai asas analisa kajiannya.

Berdasarkan kepada petunjuk yang terdapat pada Jadual 2 ini, Moskos berpendapat bahawa analisis tersebut akan dapat membayangkan sama ada sesebuah pasukan tentera itu telah beralih dari 'institutional' kepada 'occupational'.

Ser	Variable	Institutional	Occupational
(a)	(b)	(c)	(d)
1.	Legitimacy	normative values	marketplace economy
2.	Role commitments	diffuse	specific
3.	Basis of compensation	rank and seniority	skill level and manpower
4.	Mode of compensation	much in non-cash form or deferred	salary and bonuses
5.	Level of compensation	decompressed; low recruit pay	compressed; high recruit pay
6.	Residence	adjacency of work and residence locales	separation of work and residence locales
7.	Spouse	integral part of military community	removed from military community
8.	Societal regard	esteem based on nation of service	prestige based on level of compensation
9.	Reference groups	'vertical' - within organisation	'horizontal' - external to organisation
10.	Evaluation of performance	holistic and qualitative	segmented and quantitative
11.	Legal system	military justice	civilian jurisprudence
12.	Postservice status	veteran's benefits and preference	same as civilian

Jadual 2

12 Kementerian Pertahanan Malaysia : *Laporan Kajian Jawatankuasa Sumber Manusia ke arah Kemajuan Anggota dalam Perkhidmatan*. 1991 - 1992, ms 1.

13 Wawancara Assisten Ketua Staf Anggota dalam program 'Face to Face' di TV 3 pada Mac 97.

14 Kertas Kerja Jabatanarah Kor Polis Tentera : *Moonlightning*. 1995.

15 Charles Moskos adalah seorang ahli fikir Amerika Syarikat. Beliau telah membuat kajian terhadap anggota tentera Amerika Syarikat dan berpendapat teorinya itu boleh digunakan untuk menganalisa halatuju anggota tentera negara lain.

16 Lihat Nota 6 : *Ibid.*, ms 57.

PENEMUAN

Secara sedar atau tidak, beberapa petunjuk yang ada telah mempamerkan bahawa kini Tentera Darat amnya dan Kor Infantri khususnya telah beranjak dari sebuah institusi kepada sebuah badan yang menawarkan pekerjaan. Keadaan ekonomi, suasana bekerja, teknologi serta beberapa faktor luaran lain merupakan stimuli kepada perubahan seseorang individu tersebut. Beberapa petunjuk yang dapat dirumuskan berdasarkan I/O Model tersebut adalah seperti berikut:

* **'Legitimacy'.** Pertumbuhan ekonomi yang pesat dalam negara telah menjadikan remaja kini tidak berminat menyertai profesion ketenteraan. Bagi mereka yang masih dalam perkhidmatan pula, sentiasa mencari ruang untuk menagih peluang yang memberi pulangan yang lebih baik di sektor swasta. Malah ada di antara mereka yang melakukan kesalahan tatatertib seperti Tidak Hadir Tanpa Cuti (THTC), penyalahgunaan dadah dan sebagainya agar mereka dapat menamatkan perkhidmatan. Ada juga anggota yang beranggapan bahawa mereka tidak dapat mengumpul harta selagi berada dalam perkhidmatan. Secara hakikatnya, mereka ini tergolong dalam kumpulan yang beranggapan bahawa profesion ketenteraan itu hanya sebagai pekerjaan sahaja. Bilangan mereka yang meninggalkan profesion tentera atas sebab-sebab mengejar ekonomi yang lebih baik menunjukkan bahawa Kor Infantri kini menuju ke arah *occupational*. Kalau dahulu profesion tentera dianggap sebagai sebuah institusi yang sangat dihormati, kini mereka melihat profesion ketenteraan itu sebagai suatu pekerjaan untuk mencari rezeki semata-mata. Kenyataan ini boleh dirumuskan melalui penulisan Panglima 1 Divisyen dalam konteks kerjaya.¹⁷ Beliau memberi ulasan mengapa remaja memilih tentera sebagai profesion seperti berikut:

- Untuk memenuhi keperluan asas kehidupan.

- Bagi mereka yang telah mempunyai taraf ekonomi yang baik, mereka memilih tentera sebagai jaminan hari tuanya kerana mengharapkan pendapatan yang stabil, perlindungan dari aspek perubatan dan ganjaran pencen.

- Untuk mencari pengiktirafan yang tertinggi (*esteem*).

- Kerana tiada pekerjaan di luar yang lebih sesuai.

- Mereka benar-benar ingin mempertahankan negara.

* **Peranan dan Penglibatan.** Sekarang ini terdapat anggota yang mempersoalkan ganjaran yang diterima. Menurut mereka ini, ganjaran seharusnya setimpal dengan kelayakan, pengalaman serta bentuk tugas yang hendak dilaksanakan. Mereka didapati mempersoalkan mengapa mereka harus membelanjakan sebahagian daripada pendapatannya kepada perkara-perkara yang jelas sebagai keperluan perkhidmatan. Contohnya mereka kurang rela menggunakan wang ringgitnya untuk memastikan pakaian mereka kelihatan kemas dan segar. Justeru itu, ungkapan sumbang seperti "Saya telah membelanjakan RM30 untuk mengubahsuaikan pakaian ini, tapi saya tak dapat apa-apa pun Tuan!" boleh didengar sebagai rungutan yang biasa. Jika profesion ketenteraan itu adalah sebagai sebuah institusi, anggota tidak akan mempersoalkan perkara-perkara yang menjadi keperluan perkhidmatan atau membandingkan ganjaran dengan peranan dan penglibatan. Sebaliknya, jika profesion ketenteraan itu adalah sebagai pekerjaan maka keikhlasan dan kejujuran dalam melaksanakan tugas harian boleh dipersoalkan.

¹⁷ Panglima 1 Divisyen : *The Standard of Professionalism in Infantry Corps Today*. 1991.

* **Ganjaran.** Menurut Moskos, anggota yang menganggap profesion tentera itu sebagai satu institusi beranggapan pangkat dan kekananan adalah sebaik-baik ganjaran. Mereka tidak mempersoalkan apa yang sepatutnya diterima berdasarkan kelayakan atau pengalaman tetapi akur dengan keputusan yang telah dibuat oleh mereka dalam hierarki tentera tersebut. Sebaliknya bagi mereka yang menganggap profesion ketenteraan itu sebagai pekerjaan, ganjaran yang diharapkan adalah lebih bersifat material iaitu pulangan dalam bentuk wang ringgit. Kini kenaikan pangkat dan kekananan sering dipersoalkan oleh anggota. Beberapa teori bersabit motivasi menunjukkan bahawa ganjaran dalam bentuk wang ringgit tidak dapat dijadikan asas yang mutlak untuk meningkatkan tahap motivasi di kalangan anggota di pasukan.¹⁸ Peningkatan ganjaran dalam bentuk wang dan motivasi adalah bersifat sementara sahaja. Oleh itu, setiap peringkat pimpinan hendaklah melihat kedua-dua aspek ganjaran *tangible* dan *non tangible* sebagai penggerak motivasi terhadap anggota yang dipimpin. Pendekatan ini pastinya sesuai kepada mereka yang mempunyai anggapan yang berbeza terhadap profesion ketenteraan.

* **Isteri dan Keluarga.**

- Dari aspek kekeluargaan pula, ia merupakan sebuah institusi yang mempunyai hubungkait dengan profesion ketenteraan seperti kata Jeneral Wickham:

*"Since we are in the readiness business, we are concerned ... with (soldiers) degree of commitment - their willingness to not only train, but also to deploy and, if necessary, to fight The need for reciprocity of this commitment is the basis of the partnership between the Army and the Army Family."*¹⁹

- Ungkapan di atas boleh diperkuatkan lagi dengan kata-kata yang diutarakan oleh Dr Trustman; *"As soon as the (marriage) knot is tied, she becomes an institution. She is part of the regiment and has a recognised rank in it ..."*²⁰

- Hubungan tersebut dapat dilihat menerusi Jadual 3²¹ di bawah.

Ser	Nature of Integration	Stable Families	Unstable Families
(a)	(b)	(c)	(d)
1.	Well Integrated Families	Family strengthen soldiers performance; unit support soldiers as a member of the family	Family weakens soldier's performance; but unit support for the soldier may improve family morale and enable it to strengthen the soldier
2.	Poorly Integrated Unit	Family strengthens soldier's performance; but unit induced stress undermines the soldiers in the family and erodes the ability of the family to support the soldier	Soldier unsupported in both environments; his performance declines in the unit and in the family

Jadual 3

18 *Behavioural Aspects of Marketing* : Keith c Williams. Heinemann, 1986, ms 211.

19 Gen John A. Wickham : *The Army Family*. Letter, 15 August 1983.

20 Ruth Jolly : *Military man family man*. Brassey's, 1987, ms 2.

21 Pearl Kartz : *Adaptation and Social Networks of Drill Sergeants' Families*, IPR

- Jadual ini jelas menunjukkan bahawa integrasi antara pasukan, soldadu dan keluarga akan dapat membantu meningkatkan prestasi kerja seseorang itu. Walau bagaimanapun, keadaan ini akan hanya wujud jika profesion ketenteraan itu dianggap sebagai sebuah institusi yang menjadikan institusi kekeluargaan itu sebagai sebuah keluarga besar sesebuah pasukan.

- Anggota tentera kini lebih cenderung menggalakkan isteri mereka bekerja supaya boleh meningkatkan taraf hidup mereka. Bagi isteri yang tidak bekerja pula, mereka hanya mesra dengan kelompok kecil sahaja dan tidak sebagai sebuah keluarga yang lebih besar iaitu di peringkat pasukan. Isteri-isteri anggota infantri juga dilihat lebih pasif dan bersifat individualistik. Mereka kurang bijak bergaul dan bernesra antara satu sama lain malah sifat-sifat sopan santun dan budi bahasa jelas telah tidak diamalkan sepenuhnya. Keadaan ini amat ketara dalam pelbagai mesyuarat dan aktiviti yang melibatkan anggota BAKAT. Selain dari itu, mereka melihat aktiviti BAKAT melalui perspektif yang negatif dan menganggapnya sebagai satu bebanan dan bukan sebagai satu tanggungjawab. Mereka tidak merasakan dirinya sebagai satu keluarga besar tentera dan pendapat yang diutarakan oleh Moskos tadi adalah sangat tepat. Kepentingan isteri dalam aktiviti BAKAT dalam menjana kejayaan suami juga telah dititahkan oleh Kolonel Yang DiPertua RAMD.²²

* **Reference Groups.** Per k a r a seperti ini amat sukar untuk kita 'qualify' tetapi

pengalaman telah mendapati bahawa terdapat golongan yang membandingkan apa yang diperolehi ketika berada dalam perkhidmatan berbanding dengan rakan yang mempunyai tahap pengalaman serta kelulusan yang sama di sektor awam. Ini bermakna 'reference groups' telah berubah dari menegak kepada mendatar. Menegak membawa erti merujuk kepada mereka yang masih berada dalam tentera manakala mendatar pula adalah rujukan kepada luar organisasi tentera. Kita pernah dengar atau baca dari akhbar bahawa suatu ketika dahulu anggota graduan Kor Jurutera telah menyuarakan tidak puashati mereka terhadap skala gaji yang diperolehi. Mereka telah membandingkan gaji yang diperolehi berbanding rakan sejawatnya di sektor awam. Ini adalah contoh rujukan mendatar.

* **Sistem Perundangan.** Dalam aspek ini, sering kita temui bahawa terdapat anggota yang tidak lagi yakin dengan sistem perundangan ketenteraan. Mereka sanggup mendapatkan khidmat guaman dari pihak awam dan yang lebih serius lagi membawa kes-kes bersifat ketenteraan kepada mahkamah awam.

KESIMPULAN

Berdasarkan penemuan yang telah dibentangkan, adalah jelas bahawa Kor Infantri kini dianggap sebagai pekerjaan dan bukan institusi. Kor Infantri yang menjadi elemen terpenting dalam evolusi peperangan darat perlu terus dikekalkan sebagai sebuah institusi. Kor Infantri disusunatur dan diolah mengikut alor hierarki yang ditetapkan. Sifat dan akhlak mulia, ketaatan, kesetiaan, dedikasi, komitmen, semangat kental dalam perjuangan dan setiakawan merupakan ciri-ciri yang sangat penting dalam perwujudan sebuah institusi. Dengan ciri-ciri tersebut, Kor Infantri akan dapat melaksanakan peranan dan fungsinya yang mencabar dan unik. Ini memerlukan sumber manusia yang "sentiasa bersama mengharungi segala cabaran". Sistem Pemerintahan Regimental (SPR) yang sangat ditekankan sekarang adalah manifestasi

22. Titah Ucapan KDYMM Kolonel Yang DiPertua RAMD sempena Santapan Malam Regimental HUT RAMD ke 64 pada 11 April 97.

pucuk pimpinan yang menghendakkan profesion ketenteraan itu dianggap sebagai sebuah institusi.

Sekiranya Kor Infantri dianggap semata-mata sebagai suatu pekerjaan atau hanya tempat untuk mencari rezeki, maka sudah tentu matlamat 'sentiasa bersama' tidak dapat dicapai. Cogankata 'TAAT SETIA' dan 'AGI IDUP AGI NGELABAN' mungkin tidak membawa sebarang makna lagi. Besar kemungkinan suatu hari nanti setiap dasar, peraturan dan arahan yang dikeluarkan akan dipersoalkan. Segala pengurusan sumber manusia, latihan mahupun pengurusan logistik yang sistematik tidak mungkin dapat diterima dengan baik, sekiranya anggapan ini terus menerus dipelopori anggota infantri. Sifat ketulusan, keikhlasan dan kejujuran dalam pelaksanaan tugas tidak lagi menjadi matlamat seseorang individu. Anggapan ini jika tidak diperbetulkan seawal mungkin akan menyukarkan Kor Infantri di masa mendatang, tambahan pula dalam kita mengorak langkah menuju ke alaf baru.

PENUTUP

Beberapa petunjuk yang wujud di kalangan anggota di pasukan jelas menunjukkan bahawa terdapat warga Kor Infantri kini telah mengalami anjakan paradigma yang menganggap profesion ketenteraan itu sebagai satu pekerjaan dan tidak sebagai satu institusi. Perkembangan ini adalah tidak sihat kerana ia tidak

menjadi pemangkin malah membantutkan perwujudan sebuah kor yang benar-benar berwibawa. Kor Infantri pada abad ke-21 perlu didokong oleh mereka yang bersemangat kental dan berjiwa besar sesuai dengan cabaran masa akan datang. Sekiranya persepsi profesion ketenteraan sebagai satu pekerjaan tidak dikikis, maka sudah pasti warga Kor Infantri akan terdiri daripada mereka yang goyah jiwa dan raga dan akhirnya boleh menggugat sifatnya sebagai nadi pertahanan negara yang unggul.

Justeru itu, semua pihak harus memikirkan bagaimana untuk mengatasi gejala kurang sihat ini. Segala program tindakan mestilah secara bersepadu dan mengambil kira perubahan yang telah diutarakan ini. Kegagalan adalah jawapan yang pasti sekiranya program yang dibuat mengandaikan keadaan persekitaran berdasarkan sebuah institusi sedangkan sasarannya mempunyai persepsi yang berlainan.

Kor Infantri perlu terus kekal sebagai sebuah institusi dan kor yang unggul dalam Tentera Darat agar ianya terus dihormati dan disegani sama ada di kalangan tentera mahupun di kalangan masyarakat umum. Keadaan masakini merupakan cabaran paling hebat bagi setiap lapisan kepimpinan dan perlu menangani permasalahan tersebut secara bijaksana. Kefahaman terhadap Teori Perubahan yang dibentangkan diharap dapat membuahkan sesuatu pendekatan yang bersepadu dan realistik serta efektif untuk membetulkan anggapan yang kian melenceng dari matlamat.

RUJUKAN

Buku :

The Associates, Office of Military Leadership. *A study of Organisational Leadership*. Stackpole Books, 1976.

H T Graham and R Bennett. *Human Resource Management*. Longman Group UK, 1992.

Keith C William. *Behavioural Aspects of Marketing*. Heinemann, 1986.

Ruth Jolly. *Military Man and Family Man*. Brassey's, 1987.

The New Encyclopedia. University of Chicago. 1975.

Jurnal :

Giuseppe Caforio. *The Military Profession : Theories of Change*. Armed Forces and Society, Volume 15 No. 1, Fall 1988.

Pearl Kartz. *Adaptation and Social Networks of Drill Sergeants' Families*. IPR

Lain-lain bahan :

Major Mohd Nasir bin Abdul Rahman. *The Standards of Professionalism in Malaysian Armed Forces - An Analysis*, August 1992.

Panglima Tentera Darat. *The Malaysian Army - Roles, Concept and Capabilities*. Ucapan kepada penuntut MTAT pada 17 Okt 96.

Kertas Kajian Kor Infantri terhadap paras motivasi anggota Kor Infantri, 1991.

Major Abdullah bin Dolmat. *The Strength and Weaknesses of the Present Structure in the Army, the Road to Reform*. MTAT, 1986.

Kementerian Pertahanan Malaysia. *Laporan Kajian Jawatankuasa Sumber Manusia ke Arah Kemajuan Anggota dalam Perkhidmatan*. 1991-1992.

Wawancara Assisten Ketua Staf Jawatan Anggota dalam program *Face to Face* di TV 3 pada Mac 97.

Kertas Kajian oleh Kor Polis Tentera. *Moonlightning*. 1995.

Kertas Kajian oleh Panglima 1 Divisyen : *The Standard of Professionalism in the Infantry Corps Today*, 1991.

Gen John A. Wickham : *The Army Family*, 1983.



Lt Kol Mohd Nasir bin Abdul Rahman adalah lepasan Kakul Military Academy, Pakistan. Dalam tahun 1979, beliau telah berjaya memperolehi Ijazah Sains Politik. Beliau telah berkhidmat di beberapa unit infantri dengan pelbagai jawatan. Disamping itu juga beliau pernah berkhidmat di Markas Tentera Darat dan jawatan terakhir beliau adalah sebagai Pegawai Staf 1 Struktur di Cawangan Perancangan dan Pembangunan (P&P). Beliau merupakan lulusan MTAT tahun 1992 dan pernah berkhidmat di bawah panji-panji PBB. Kini beliau adalah Pegawai Memerintah Batalion Ke-12 Rejimen Askar Melayu Diraja. Beliau aktif dalam bidang penulisan terutama dalam perkara-perkara yang ada hubungkait dengan perkhidmatan. Artikel ini merupakan satu lagi sumbangan beliau ke arah pengurusan sumber manusia yang berkesan.

KETENTERAAN DAN NILAI-NILAI ISLAM

MEJ BURHANUDDIN BIN ABDUL JALAL

"Dan sediakanlah untuk (menentang) mereka (musuh) yang menceroboh segala jenis alatan yang dengan kamu sediakan dari pasukan-pasukan berkuda yang lengkap, sedia untuk menggerunkan dengan persediaan itu musuh Allah dan musuh kamu serta musuh-musuh yang lain dari mereka yang kamu tidak mengetahui sedangkan Allah mengetahuinya. Dan apa sahaja yang kamu belanjakan pada jalan Allah akan disempurnakan balasannya kepada kamu dan kamu tidak akan dianiaya"

- surah an-Anfal ayat: 60

PENDAHULUAN

Menurut Albert D. Biderman (1967) dalam bukunya, *The Draft: A Hand Book of Facts and Alternative*, telah menjelaskan tentang definisi ketenteraan sebagai institusi khas untuk mengawal dan mengekalkan keamanan negara. Sehubungan dengan itu Angkatan Tentera Malaysia (ATM) yang ada pada hari ini adalah warisan dari kegemilangan Kerajaan Melayu yang bermula dari Kerajaan Sri Wijaya pada abad ketiga sehinggalah ke zaman Kerajaan Melayu Melaka pada awal abad ke-16. Ketika itu orang-orang Melayu telah melibatkan diri di dalam ketenteraan sebagai pendekar dan hulubalang kepada raja yang memerintah. Pendekar dan hulubalang ini amat patuh dan setia kepada raja-raja yang memerintah melalui pembesar-pembesar raja. Segala perintah raja akan didahulukan dari tugasnya sendiri; *"kerja raja dijunjung, kerja sendiri dikelek"*. Apabila berlaku peperangan, orang-orang besar istana yang bergelar seperti Sri Nara Diraja, Tun Bija Sura dan sebagainya akan memimpin pendekar-pendekar ini. Sifat orang-orang Melayu yang terlalu taat kepada ketua dan rajanya, cara hidup yang berpuak-puak serta tidak mengikut aliran teknologi peperangan menyebabkan kegemilangan pemerintahan Kerajaan Melayu Melaka berakhir pada tahun 1511 apabila dikalahkan oleh Portugis. (A. Samad Idris: 1983).

Semenjak itu, penjajahan ke atas orang-orang Melayu bermula sehinggalah Persekutuan Tanah Melayu mencapai kemerdekaan pada 31 Ogos 1957. Mulai pada tahun 1930an, orang-orang Melayu memasuki tentera patriotism, iaitu mahu berjuang untuk mempertahankan negara dan membuktikan kepada penjajah Inggeris bahawa orang-orang Melayu bukan malas dan suka berpeleseran sahaja. Sekarang ini keadaannya berbeza. Hampir 90% calon-calon pegawai kadet dan rekrut memilih kerjaya tentera sebagai pilihan terakhir setelah gagal mendapat sebarang pekerjaan lain di sektor awam atau swasta. Mereka mendapati kerjaya tentera menyekat kebebasan hidup remaja, pulangan pendapatan rendah sedangkan keperluan tugas banyak menggunakan tenaga dan berisiko tinggi, tidak "glamour" dan berpisah dari keluarga. (Sutarji Kasmin: 1994).

Di Amerika Syarikat, profesion ketenteraan bukanlah satu profesion yang terhormat (prestigious); mereka memasuki tentera juga bukan kerana patriotism tetapi kerana memerlukan pekerjaan yang memberi ganjaran yang lebih baik dan harapan untuk merantau ke luar negara. Sebaliknya di India, mereka memasuki tentera kerana ketenteraan adalah profesion yang ulung dan hanya yang terbaik sahaja yang terpilih.

Peranan utama ATM ialah untuk mempertahankan agama, bangsa dan negara dari sebarang ancaman darat, laut dan udara. Dalam mempertahankan agama, anggota-anggota Islam ATM mempunyai tanggungjawab sebagai tulang belakang ke atas keselamatan agama Islam dan orang-orang Islam dari pupus di bumi Malaysia seperti yang terjadi ke atas Bosnia-Herzegovina dan negara-negara Islam di Asia Tengah yang ditakluki komunis. Tugas-tugasnya semasa aman ialah untuk membuat pengawasan dan pengawalan daratan, lautan dan udara negara dari sebarang pencerobohan yang mengancam kedaulatan dan aset ekonomi negara; berlatih ilmu peperangan dan sebagai alat kepada pelaksanaan dasar luar serta pembangunan negara. Dalam membantu pelaksanaan dasar ini; ia termasuklah penugasan pegawai-pegawai dan anggota dalam misi keamanan di bawah panji-panji PBB.

Semenjak zaman darurat yang lalu, ATM telah memikul beban untuk mempertahankan negara dari ancaman pengganas-pengganas komunis. Hasilnya anggota-anggota ATM kini mahir dalam peperangan melawan, pengganas komunis. Setiap anggota digembeling dalam semua aspek fizikal, mental dan kerohanian untuk memerangi ancaman komunis. Pada tahun-tahun 1970an dan 1980an pula, ancamannya bertukar kepada kemungkinan Vietnam meluaskan pengaruhnya ke Kemboja dan seterusnya ke Thailand dan Malaysia dalam apa yang digembar-gemburkan sebagai "*Teori Domino*". Pada masa yang sama, ATM telah dipertanggungjawabkan untuk menduduki dan mempertahankan pulau-pulau dan terumbu-terumbu di luar pantai Laut China Selatan dari pendudukan oleh negara-negara luar yang juga membuat tuntutan yang sama. Di atas realisasi ini, ATM telah menukar strategi pertahanannya kepada "*deterrence*", "*defence forward*" dan "*defence in depth*".

Perubahan strategi ini menetapkan supaya ATM mengubah keupayaannya kepada peperangan konvensional yang mampu menghalang serangan dari luar negara dari tiba ke pantai Malaysia. Keupayaan tempur baru ini tertumpu kepada penggunaan peralatan moden dan canggih. Penekanan keupayaan peperangan konvensional ini telah berterusan setelah pengganas komunis menyerah diri pada tahun 1989. (Roger Stubbs: 1991).

Perubahan keupayaan dasar pertahanan dan strateginya mempengaruhi sikap individu supaya mempunyai daya tempur yang lebih kental untuk menghadapi peperangan berteknologi tinggi. Dalam pertempuran seperti ini, seperti yang terjadi semasa Perang Teluk pada tahun 1991, tentera Iraq tidak melihat musuh di sepanjang masa pertempuran selama 42 hari kecuali hujan bom dan peluru berpandu yang datang dari kapal terbang, kapal laut dan kapal selam yang jaraknya beratus-ratus batu dari medan peperangan. Tentera Iraq yang mengalami kadar korban yang tinggi di samping keberkesanan peperangan saraf tentera bersekutu telah mendorong mereka menyerah diri secara beramai-ramai sebelum sempat melepaskan tembakan daripada senjata masing-masing. (Garry Waters: 1992).

Peperangan berteknologi tinggi seperti ini memerlukan kemahiran strategi, kekuatan rohani dan keupayaan menguasai teknologi sehingga mampu mengendalikan peralatan tempurnya secara optimum untuk menangkis sebarang bentuk serangan jarak jauh.

Keanggotaan ketiga-tiga perkhidmatan ATM dianggarkan seramai 110,000 orang dengan tanggungannya seramai 440,000 orang lagi. Dari jumlah itu anggota-anggota keturunan Melayu dan beragama Islam melebihi 95%. Anggaran perbelanjaan di dalam Rancangan Malaysia ke-6 untuk ATM menyelenggarakan kelengkapan tentera dan pembayaran gaji serta ganjaran-ganjaran lain ialah RM6,000 juta atau 10.9% dari pendapatan kasar negara. ATM juga telah membantu pertumbuhan ekonomi negara melalui penubuhan industri pertahanan, pembekalan pertahanan dan perkhidmatan terus kepada pekerjaan. (Sutarji Kasmin: 1994).

PERANAN TENTERA DI DALAM ISLAM

Di zamannya, Rasulullah s.a.w. berjaya membuka kota Makkah dan dengan bilangan penganut Islam yang ramai, baginda menyediakan satu kumpulan yang menumpukan perhatian kepada soal peperangan. Kumpulan ini yang

dianggotai secara sukarela, sentiasa siap sedia untuk menghadapi peperangan. Tidak ada pasukan tentera tetap yang dikerah untuk kepentingan jihad sehinggalah di zaman pemerintahan Saidina Umar Ibnu Al-Khattab RA. Semenjak itu, anggota-anggota pasukan tentera dibentuk dalam satu organisasi yang diketuai oleh seorang naqib, sebagai panglima perang. Mereka dibayar gaji, diberi kelengkapan perang dan latihan yang secukupnya.

Kejayaan tentera Islam yang bermula pada tahun 610M di bawah pimpinan Rasulullah s.a.w. terus berkembang selepas wafatnya baginda pada tahun 632M. Dalam masa 25 tahun sahaja, Tentera Islam di bawah pemerintahan tiga orang "Khulafa' Al Rasyidin" iaitu Khalifah-khalifah Abu Bakar, Omar dan Othman RA telah mengembangkan Islam bukan hanya ke Iran, Iraq, Syria, Palestin dan Mesir malah ke Afrika Utara. Di zaman pemerintahan Khalifah Ali pula, perkembangan ini terhenti sementara dan hanya disambung semula di zaman pemerintahan Bani Umayyah dan Bani Abbasiyah sehingga kurun ke-10. Perkembangannya ke barat sehingga ke Sepanyol dan Perancis, manakala ke Timur pula sehingga ke Afghanistan, Turkistan dan Sind di India. Malangnya pada kurun ke-11 pula, kegemilangan pemerintahan Islam telah semakin menurun sehingga menyebabkan kuasa kecil mengambil alih kuasa. Kemerosotan pemerintahan Islam bermula dengan kekalahan semua kerajaan Islam Eropah di tangan Tentera Salib pada tahun 1099 dan Tentera Tartar dari Asia Tengah sehingga ke Baghdad pada tahun 1258. (Israr Ahmad, hal 13: 1980).

Kerajaan Tentera Islam yang hampir menguasai benua Eropah dan Asia sebelumnya adalah kerana perjuangan Tentera Islam yang sentiasa memegang "*Al-Quran di tangan kiri dan pedang di tangan kanannya*". Sebaliknya, kekalahan Tentera Islam kemudiannya adalah kerana mereka "*tidak lagi memegang Al-Quran dan pedangnya pula hanya dipegang di tangan kiri sahaja*". Tentera Islam menang kerana berpegang kuat kepada teladan tinggi yang dibawa oleh agama suci. Khalifah Saidina Umar Ibnu Khattab RA pernah mengingatkan supaya Tentera Islam menjauhi hidup mewah, "*Hidup sederhana*,"

maka sesungguhnya kemewahan itu akan menghilangkan nikmat". Apabila Tentera Islam di negara barunya mula kaya-raya, hidup mewah, bermegah-megah dengan harta, melalaikan sembahyang dan mengikut hawa nafsu, lalu di tangan merekalah bermulanya kejatuhan kerajaan Islam! (Mohamad Khit Khattab, hal 10: 1986).

CIRI DAN NILAI TENTERA ISLAM

Berdasarkan buku *Profesien Ketenteraan Islam dan Bimbingan Rohani*, kekuatan pasukan tentera tertakluk kepada lima faktor utama, iaitu keupayaan setiap anggota pejuang, mempunyai kelengkapan (logistik) yang cukup, disiplin yang tinggi, kekuatan rohani (moral) dan semangat berpasukan.

Setelah dihalusi, faktor kerohanian adalah mengatasi faktor-faktor material kerana kekuatan rohani setiap anggota pejuang akan menjadi penggerak kepada disiplin dan semangat berpasukan. Sebaliknya kekuatan material tidak memberi erti tanpa pengendalinya.

Angkatan tentera negara-negara Barat seperti Amerika Syarikat dan Britain mengakui kekuatan rohani adalah di antara kualiti ketenteraan yang mesti dihayati. Field Marsyal Montgomery menyatakan, "*Kekuatan sebenar angkatan tentera itu bergantung kepada kekuatan rohani, semangat wira, semangat berpasukan dan disiplin ketenteraan*". (Nigel Hamington, hal 474: 1982).

Untuk tujuan ini, mereka telah menetapkan bahawa kekuatan rohani dibina di atas nilai ketenteraan (core values) iaitu "*duty, honour and country*". "*Duty*" yang memberi erti kesediaan untuk berkorban dan kesungguhan untuk menyempurnakan sesuatu tugas dengan cara terbaik yang termampu sebagaimana yang disebutkan oleh Abraham Lincoln, bekas Presiden Amerika Syarikat, "*I do the best I know how, the very best can*". "*Honour*" memberi erti pelakuan penuh integriti dalam perkataan dan perbuatan serta tidak akan membenarkan sebarang penyelewengan darinya seperti

berbohong, menipu, mencuri atau merelakan orang lain melainkannya. "Country" pula memberi erti patriotisme, iaitu kesanggupan untuk berkorban demi kepentingan negara. (Sutarji Kasmin, hal 10: 1994).

Teras pembinaan kekuatan rohani tentera Islam di zaman kegemilangan ialah aqidah (keimanan). Aqidah telah menjadikan orang-orang Arab rela menempuh segala kesulitan dan kepayahan, sanggup berjuang bermati-matian dan berkorban jiwa kerananya.

Aqidah inilah yang menjadi teras kualiti pertempuran (combat quality) seperti disiplin, tabah, teguh hati dan sentiasa siap sedia (alert). Disiplin bererti kepatuhan menurut arahan-arahan (taat) dan melaksanakannya secara lahir tanpa sebarang keraguan dan dengan niat baik, berhati-hati, amanah dan ikhlas akan membezakan kualiti seseorang anggota tentera. Tentera yang tidak berdisiplin tidak akan memenangi sebarang peperangan walau bagaimana baik organisasinya, sempurna peralatannya, mantap latihannya, bagus dan kuat kepimpinannya. Sifat tabah yang bererti kesanggupan untuk menghadapi kesulitan di medan perang perlu diutamakan kerana Allah menyebutnya sebanyak 130 kali melalui firman-firman Nya. Sifat teguh hati bermakna kesanggupan untuk bertahan hingga ke titisan darah terakhir, tidak lari atau menyerah diri kepada musuh dan berani menghadapi musuh dengan penuh keazaman dan kedegilan. Allah menyebutnya sebanyak 18 kali dalam Al-Quran.

Di samping kualiti pertempuran, keberanian adalah sangat dituntut sebagai faktor utama kemenangan Tentera Islam. Allah memerintah umatnya supaya berani dan mara ketika berhadapan dengan musuh. Demi meningkatkan keberaniannya, umat Islam perlu percaya kepada "qadha" iaitu kepercayaan bahawa sesuatu jiwa itu tidak akan mati selagi belum tiba ajalnya dan bahawa seseorang itu pasti akan mati pada hari yang ditetapkan untuknya sama

ada di medan perang atau di rumahnya. Sifat sentiasa siap sedia dan berjaga-jaga (alert) sangat dikehendaki oleh Allah kerana seseorang tentera yang tidak lalai, tidak mungkin dapat diperangkap oleh musuh-musuhnya.

Sifat ini perlu diperkuatkan dengan jihad. Allah sangat menekankan sifat ini dengan mengulanginya sebanyak 46 kali di dalam Al-Quran. Aqidah juga membentuk sifat-sifat asas kemanusiaan yang sesuai untuk anggota-anggota tentera seperti berakhlak mulia, bekerja dengan ikhlas, mendirikan kebenaran dan keadilan, amanah, tidak menzalimi sesiapa dan sanggup melupakan kepentingan diri demi mencapai kepentingan tertinggi ummah. Akhlak ialah kayu pengukur untuk membentuk tamadun yang menjadi benteng "keramah insaniah" dan tabiat yang tidak menyenangkan seseorang seperti suka mengambil sesuatu bukan miliknya dan cara hidup yang menurut hawa nafsu seperti minum arak, menyalahgunakan dadah dan suka berfoya-foya; keikhlasan dan niat yang baik akan menghasilkan kejayaan dan menghindarkan sifat riak, munafik dan dusta.

Kebenaran dan keadilan pula adalah perlakuan yang setia, bersih dan suci dari sebarang perbuatan keji seperti mencuri, mungkir janji, khianat, dusta, zalim dan zina. Sifat amanah akan mendorong kesempurnaan di dalam semua tugas dan urusan sehingga tidak menjadi sebarang bentuk penyelewengan yang boleh melemahkan organisasi khususnya organisasi ketenteraan.

PENUTUP

Dalam konteks Angkatan Tentera Malaysia, sudah tentu hasrat untuk membina sebuah angkatan yang berwibawa serta disegani oleh kawan dan lawan perlu dibangunkan dalam segenap aspek fizikal dan logistik. Namun aspek kekuatan akidah perlu dibangunkan bersama bagi memastikan kita sentiasa

diberi pertolongan oleh Allah S.W.T dalam keadaan aman damai dalam negara yang mendapat limpahan keampunan-Nya sebagaimana firman Allah S.W.T

yang bermaksud, "Negeri yang baik dan mendapat keampunan Tuhan (ke atas penduduknya)". Surah Saba' ayat 15.

RUJUKAN

Albert D Biderman, *The Draft : A Hand Book of Facts and Alternatives*, University Press, Chicago. 1967.

Rogers, Stubb. *Malaysian Defence Policy; Strategy Versus Structure*, Cotemporary Southeast Asia, Vol 13 No. 1 Jan 1991.

Jen Mahmood Shitg Khattab, *Islam dan Kemenangan*, Pustaka Ikhwan Kuala Lumpur 1986.

Profesion Ketenteraan Islam dan Bimbingan Rohani. Jabatanarah KAGAT 1986.



Mej Burhanuddin Abdul Jalal adalah Pegawai Staf 2 Penerbitan di Jabatanarah Kor Agama ATM. Memiliki Sarjana Muda Pengajian Islam (Kepujian) dari UKM. Beliau banyak menghasilkan tulisan dalam bentuk rencana, makalah dan berita untuk akhbar dan majalah tempatan. Kini sedang mengikuti Pengajian Kewartawanan di ITM, Shah Alam.

Sekiranya kamu bersikap keras dan berkata kasar, tentulah mereka menjauhkan diri dari sekelilingmu, kerana itu maafkanlah mereka, pohonkanlah ampun bagi mereka dan bermesyuaratlah dengan mereka dalam urusan itu.

Surah Ali Imran ayat 159

ANJAKAN PARADIGMA DALAM UJIAN KEMAHIRAN MENEMBAK TENTERA DARAT

BRIG JEN MOHD ARIS BIN SALIM

PENDAHULUAN

Ujian Kemahiran Menembak Tentera Darat (UKM TD) 1996 berakhir pada 22 Jun 1996. Ujian ini diadakan dua tahun sekali dan ujian terakhir ialah pada tahun 1994. Daripada statistik-statistik ujian, ada tanda-tanda peningkatan dalam prestasi tembakan dan ini telah membuat ramai di antara kita merasa bangga. Walau bagaimanapun, statistik-statistik ujian ini tidak memberi gambaran prestasi profesional yang sebenarnya. Jika dikaji ujian-ujian yang telah dilaksanakan, kita akan mendapati bahawa kaedah-kaedah ujian yang ada sekarang ini, tidak menguji kemahiran seseorang penembak TD itu di dalam profesionnya yang sebenar. Oleh yang demikian, keputusan UKM TD tidak mencerminkan kemahiran profesionalisma dan seterusnya tidak memberi sumbangan positif terhadap perkembangan doktrin TD.

Justeru itu, kaedah-kaedah UKM TD yang dijalankan sekarang ini perlu dikaji semula agar satu rumusan yang lebih berkesan dapat dibuat demi menyumbang kepada perkembangan doktrin yang sebenar.

PERATURAN SEMASA

Peraturan semasa UKM TD terkandung di dalam risalah TD, Kod T 3112, Ujian Kemahiran Menembak TD 1982. Ujian-ujian dibahagikan kepada empat kategori iaitu ujian raifal, ujian pistol, ujian senjata bantuan dan ujian lorong hutan. Kesemuanya terdapat 38 jenis ujian.

Sejak risalah ini dikeluarkan pada tahun 1982, beberapa pindaan kecil kepada kaedah-kaedah menembak telah dibuat, tetapi pindaan-pindaan ini tidaklah menyentuh soal pokok lantaran ia tidak begitu

ketara. Pindaan-pindaan ini adalah seperti berikut:

- * Ujian BAKAT dibatalkan.
- * Kaedah menembak kepada Praktis 4 bagi Ujian Raifal Peringkat I dipinda.
- * Kaedah menembak kepada Praktis 3 kepada Ujian Raifal Peringkat II dipinda.
- * Kaedah Praktis 1 dan 2 kepada Ujian Pistol dipinda.
- * Ujian Serangan Seksyen telah diadakan.
- * Beberapa peraturan-peraturan kecil telah ditambah seperti terdapat di dalam "Undang-Undang Tempatan".

ANALISA KE ATAS KAEDAH-KAEDAH UJIAN

Faktor-faktor Pengaruh. Dalam membuat analisa ini, penulis mengambil kira faktor-faktor berikut:

- * **Objektif UKM TD.** Salah satu objektif UKM TD ialah "untuk menguji dan menilai taraf kemahiran anggota TD dalam pengendalian senjata". Rangkaian perkataan "kemahiran anggota TD", mestilah bermaksud kemahiran semasa pertempuran kerana anggota TD memang dilatih untuk pertempuran. Oleh yang demikian, ujian dalam UKM TD perlu diubahsuai untuk mengambil kira suasana-suasana dan sifat-sifat pertempuran.
- * **Suasana Pertempuran.** Bagi maksud perbincangan ini suasana pertempuran dibahagikan kepada dua, iaitu tekanan-tekanan ke atas penembak dan sifat-sifat musuh.

- Tekanan Ke Atas Penembak.

Penembak-penembak akan mengalami beberapa tekanan fizikal, intelektual dan emosi pada waktu siang dan malam. Seorang anggota TD semasa pertempuran akan merasa letih, lapar, sedih, takut, kelam-kabut, fikiran tidak menentu dan pelbagai jenis tekanan. Di dalam keadaan sedemikian, ia dikehendaki mencari dan membunuh musuh. Ini memerlukan mengawal diri supaya tembakan yang tepat dapat dihasilkan bila berlakunya pertempuran.

- **Sifat-sifat Musuh.** D a l a m pertempuran, musuh tidak akan mendedahkan dirinya dengan sengaja untuk dikesan atau ditembak. Jika mereka menyerbu mereka akan melaksanakan serbuan dalam kumpulan secara mengejut, meletakkan kita di dalam keadaan kelam kabut. Ada masanya musuh akan berpakaian seragam yang menyerupai pakaian kita.

* **Falsafah TD.** Slogan "*Satu Peluru, Satu Musuh*" adalah satu falsafah TD bertujuan untuk menerapkan nilai dan amalan ketepatan tembakan dan penjimatan peluru. Dalam mana-mana latihan kaedah tembakan, falsafah ini perlu dipraktikkan.

* **Peningkatan Kreativiti dan Inovasi.** Hasil UKM TD perlu, bukan sahaja untuk peningkatan kemahiran menembak, tetapi juga perlu membawa kepada peningkatan kreativiti dan inovasi dalam teknik-teknik menembak dan pengendalian senjata. Peraturan yang ketat akan hanya melahirkan penembak yang bersifat minda mekanikal (*mechanical minded*). UKM TD bertujuan untuk melatih anggota TD berfikir dan berupaya membezakan antara kawan dan lawan semasa dalam pertempuran. UKM TD sewajarnya berupaya melahirkan seorang soldadu yang berfikir (*a thinking soldier*).

Kaedah-kaedah Ujian Semasa.

Kaedah-kaedah ujian yang dilaksanakan sekarang ini tidak mengambilkira faktor-faktor yang dinyatakan di atas. Oleh yang demikian, prestasi seseorang ataupun kumpulan pada akhir UKM TD hanya memberi taraf kemahiran dalam keadaan tenang dan tenteram. Rencana ini akan mengulas beberapa praktis dan peraturan yang dilaksanakan:

* **Ujian Pistol.** Di dalam praktis-praktis ujian pistol, penembak hanya dikenakan tekanan sasaran, dengan cara had masa dedahan untuk menembak. Penembak sendiri tidak dikenakan apa-apa tekanan fizikal, intelektual ataupun emosi. Tekanan sasaran pun tidak begitu serius kerana penembak tahu kedudukan sasaran (musuh) dan sasaran pula tidak berubah dari tempat berdirinya. Ini adalah jauh daripada keadaan pertempuran dimana musuh akan bertukar tempat dan penembak pula di dalam keadaan kelam kabut. Kaedah sekarang hanya menguji kemahiran mekanikal.

* Ujian Raifal.

- **Peringkat I.** Di dalam peringkat ini terdapat empat praktis. Pada tiga praktis pertama, penembak dikehendaki menembak dari jarak 300 meter, dalam kedudukan baring, ke arah sasaran-sasaran yang statik bagi dua Praktis pertama, dan sasaran dedahan pada praktis ketiga. Praktis ke empat ialah tembak dan gerak, di mana penembak, sama ada berjalan dan berlari dari 100 meter ke 50 meter, dikehendaki menembak ke sasaran-sasaran dedahan dan bergerak. Pada praktis-praktis peringkat ini, didapati bahawa tekanan kepada penembak sungguh minima. Pada tiga praktis yang pertama, penembak-penembak boleh menetap dan mengagak di mana sasaran akan muncul semasa

dedahan dibuat. Masa untuk menembak lebih dari mencukupi. Seseorang penembak awam dari mana-mana persatuan menembak, yang tidak diberi latihan ketenteraan tetapi hanya diberi latihan ke atas pengendalian raifal, boleh mencapai prestasi yang baik dalam praktis-praktis ini. Praktis-praktis ini tidak sepenuhnya menguji kemahiran pengendalian senjata oleh "anggota TD" di dalam fungsi utamanya, iaitu tembak tepat dan cepat dalam pertempuran. Praktis-praktis ini lebih menekankan kepada kemahiran mekanikal iaitu, "*sasaran naik, sasaran ditembak*".



Ujian Raifal tidak memberi tekanan fizikal, intelektual dan emosi, hanya sekadar "mechanical minded" sahaja.

- **Peringkat II.** Beberapa orang penembak yang terbaik dari Peringkat I tadi akan meneruskan ujian mereka pada peringkat ini. Peringkat II ini mengandungi tiga praktis. Praktis pertama menembak dari jarak 300 meter ke sasaran statik yang didedahkan selama 45 saat. Praktis kedua menembak dari jarak 200 meter ke sasaran yang didedahkan sebanyak lima kali selama tiga saat bagi tiap-tiap dedahan. Praktis ketiga pula ialah 'tembak dan gerak' dari 250 meter ke 100 meter dan sasaran akan bergerak, sama ada berlari ataupun berjalan. Diperhatikan di dalam ujian ini, ada tekanan sasaran kepada penembak tetapi penembak masih lagi tidak

dikenakan tekanan-tekanan fizikal, emosi dan intelektual.

* **Ujian Lorong Hutan.** Dalam ujian ini penembak dikehendaki melaksanakan dua praktis. Praktis I ialah bergerak mengikut satu lorong hutan sejauh 30 meter dan menembak 10 sasaran yang tiap-tiap satunya didedahkan selama empat saat di tempat-tempat yang tidak diketahui oleh penembak. Penembak dikehendaki menembak dengan udi senjata di bahu. Praktis II adalah sama kaedahnya dengan praktis I tetapi tembakan ini dilakukan dengan udi senjata dikepit di pinggang. Diperhatikan di dalam ujian ini, penembak tidak dikenakan apa-apa tekanan pertempuran. Sekali lagi kecekapan minda mekanikalnya diuji iaitu "*sasaran naik, sasaran ditembak*". Penembak tidak dikehendaki berfikir sama ada sasaran itu musuh, rakan ataupun binatang.

* **Pemberian Markah.** Markah diberi berdasarkan bilangan peluru yang kena pada sasaran. Ini bermakna, banyak peluru yang kena maka banyaklah markah. Di sini falsafah "Satu Peluru, Satu Musuh" itu tidak diamalkan. Penembak tidak bersikap "*bunuh musuh dengan bilangan peluru yang sedikit*", tetapi sebaliknya bersikap habiskan peluru yang ada untuk mendapatkan markah yang banyak. Penjimatan peluru tidak diberi penekanan dalam kaedah pemberian markah.

* **Keketatan Peraturan.** Peraturan menembak sekarang terlalu ketat dan tidak memberi ruang kepada penembak untuk berkreaitif ataupun berinovatif. Satu kaedah menembak yang memberi ruang untuk kreativiti akan menghasilkan perkembangan teknik menembak dan peralatan bantuan tembakan.

* **Ujian Malam.** Dasar latihan sekarang menghendaki 50 peratus daripada latihan

dilaksanakan pada waktu malam. Dasar ini mesti dipraktikkan dalam UKM TD supaya aktiviti agung TD ini mendokong cita-cita TD. Pada ketika ini, UKM TD hanya dilaksanakan pada waktu siang dalam cuaca baik.

* **Jenis Sasaran.** Sasaran yang digunakan sekarang ini semuanya menggambarkan musuh dalam satu jenis pakaian. Ini bermakna penembak tidak perlu berfikir lagi ataupun membuat pilihan kepada sasaran. Untuk membina daya berfikir dan memilih, sasaran perlu dipelbagaikan termasuk sasaran yang tidak patut ditembak.

Rumusan. Daripada analisa ini, didapati bahawa kaedah-kaedah menembak pada ketika ini tidak menguji dengan sebenarnya kecekapan seorang anggota TD untuk mengendalikan senjata dalam suasana pertempuran. Ini kerana:

- * Penembak tidak dikenakan tekanan fizikal, intelektual dan emosi.
- * Kaedah sekarang menguji kecekapan minda mekanikal seorang penembak, bukan minda rasionalnya.
- * Falsafah "Satu Peluru, Satu Musuh" tidak diamalkan.
- * Kemahiran menembak pada waktu malam tidak diuji.

KAEDAH UJIAN YANG DISYORKAN

Dalam membuat syor untuk kaedah baru UKM TD ini, realiti-realiti berikut diambil kira:

- * Suasana pertempuran sukar untuk disimulasikan sepenuhnya.
- * Keselamatan menembak tidak boleh dikompromikan.
- * Ujian mesti membolehkan TD memilih penembak-penembak untuk

pertandingan menembak di luar TD.

* Kos ujian tidak terlalu tinggi dan jangkamasa ujian tidak begitu lama.

Kaedah ujian yang disyorkan ini berlandaskan kepada peraturan-peraturan seperti berikut:

* **Tekanan.** Tekanan pertempuran dikenakan kepada penembak-penembak dengan cara membuat mereka berlari dengan pakaian tempur, melintasi beberapa halangan dan memberi masa tembakan yang singkat dan tidak menentu.

* **Sasaran.** Penembak terpaksa berhadapan dengan sasaran yang tidak semestinya musuh. Dalam masa yang singkat penembak mestilah memilih sasaran. Ada sasaran yang memberi markah yang tinggi dan ada yang memberi markah rendah.

* **Pemberian Markah.** Markah diberi kerana dapat membunuh musuh dan menjimatkan peluru. Satu peluru yang kena pada kawasan kritikal musuh akan dianggap sebagai membunuh musuh dan diberi markah tinggi. Jika lebih daripada satu peluru yang kena kepada musuh, peluru itu akan dianggap membazir dan seterusnya sedikit markah akan dipotong. Baki peluru daripada satu tembakan yang membunuh akan diberi markah bonus kerana ini dikira sebagai penjimatan.

* **Kelonggaran Peraturan.** Penembak diberi ruang untuk memilih kedudukan menembak dan menggunakan peralatan bantuan yang terdapat di dalam Jadual Peralatan TD. Inovasi-inovasi buatan sendiri dibenarkan.

* **Peringkat Ujian Raifal.** Ujian dilaksanakan dalam dua peringkat. Peringkat I, ialah untuk menguji kecekapan menembak dalam keadaan pertempuran dan Peringkat II pula ujian tembak-tepat (marksmanship). Ujian tembak-tepat ini dihadkan kepada beberapa anggota sahaja yang sifat-sifat tahan lasak mereka telah diuji semasa ujian Peringkat I.

Contoh Ujian Raifal Peringkat I. Di dalam ujian ini, penembak-penembak dikehendaki berlari satu kilometer atau lebih dalam masa yang telah ditetapkan. Sebagai contoh; penembak dikehendaki berlari satu kilometer dalam masa 10 minit. Seterusnya penembak-penembak dikehendaki menembak sasaran pada jarak 300 meter, 200 meter dan 100 meter. Peraturan terperinci adalah seperti berikut:

*** Praktis 1.**

- Penembak-penembak dikehendaki berlari dan merentasi beberapa halangan sejauh satu kilo-meter ke tapak tembak 300 meter. Mereka diberi peluru sebanyak 20 butir.

- Tujuh minit selepas mereka mula berlari, sasaran akan dinaikkan selama lima minit. Ini akan memberi tekanan kepada penembak untuk berlari lebih pantas ke tapak tembak. Penembak-penembak dikehendaki "membunuh" sasaran dalam baki masa yang ada.

- Cukup sahaja lima minit, sasaran diturunkan, senjata diselamatkan dan markah dikira seperti berikut:

◆ Pegawai Benteng mengesahkan sama ada sasaran dibunuh ataupun tidak. Ini berasaskan kepada adanya satu butir peluru di dalam kawasan tertentu di sasaran. Pegawai tersebut juga memaklumkan bilangan peluru yang kena pada sasaran.

◆ Pada masa yang sama, Pegawai Tapak Tembak akan mengira baki peluru yang ada pada penembak. Seterusnya markah dikira mengikut borang seperti di Rajah 1. Rajah 1 menunjukkan

BORANG MARKAH				
Bil.	Kenyataan	Bunuh	Tak Bunuh	Catatan
(a)	(b)	(c)	(d)	(e)
1.	Peluru Diberi	20	20	Markah : a. Diberi : (1) 10 markah setiap butir bagi sasaran dibunuh. (2) 2 markah setiap butir bagi penjimatan b. Tolak : (1) 1 markah setiap butir bagi peluru (tidak ditembak). (2) 1 markah setiap butir pembaziran.
2.	Baki	12	8	
3.	Jumlah Peluru Ditembak	8	12	
4.	Peluru Membunuh	1	0	
5.	Pembaziran	7	12	
6.	Markah Membunuh	10	0	
7.	Campur Markah Penjimatan (Baki x 2)	24	0	
8.	Jumlah	34	0	
9.	Tolak Pembaziran (Pembaziran x 1)	-7	-12	
10.	Jumlah Markah	27	-12	
Nota : Jika pembunuhan tidak berlaku, tiada markah bonus diberi untuk penjimatan. Semua peluru ditembak dikira sebagai pembaziran.				

Rajah 1 : Kaedah Perkiraan Markah Praktis 1

perkiraan markah bagi sasaran yang dibunuh dan tidak dibunuh.

* **Praktis 2.**

- Selepas sahaja Praktis 1 selesai, penembak diberi 20 butir peluru lagi. Dengan isyarat dari Pegawai Tapak Tembak, penembak akan berlari ke tapak menembak 200 meter. Sasaran akan didedahkan sebanyak lima kali, dua kali dedahan ialah musuh berpangkat pegawai. Sasaran tidak akan muncul dari tempat yang sama.

- Pemberian markah ialah 10 untuk sasaran biasa dan 20 untuk sasaran pegawai. Borang Markah adalah seperti di Rajah 2.

* **Praktis 3.**

- Selesai sahaja Praktis 2, penembak diberi 20 butir peluru lagi. Dari 200 meter penembak berlari ke 100 meter. Apabila penembak sampai kira-kira 50 meter dari tempat menembak, sasaran didedahkan selama 4 saat, bergerak dari kanan ke kiri. Seterusnya pada masa yang tidak menentu, sasaran didedahkan sebanyak empat kali lagi dari kiri ke kanan dan juga kanan ke kiri.

- Perkiraan markah sama seperti di Rajah 1.

* **Praktis 4.**

- Ini adalah ujian tembakan malam. Dengan peluru sebanyak 20

BORANG MARKAH

Bil.	Kenyataan	Bunuh	Tak Bunuh	Catatan
(a)	(b)	(c)	(d)	(e)
1.	Peluru Diberi	20	20	Markah : a. Diberi : (1) 20 markah setiap butir bagi sasaran Pegawai dibunuh. (2) 10 markah setiap butir bagi sasaran biasa dibunuh. (3) 2 markah setiap butir bagi penjimatan b. Tolak : (1) 1 markah setiap butir bagi peluru (tidak ditembak). (2) 1 markah setiap butir pembaziran.
2.	Baki	12	8	
3.	Jumlah Peluru Ditembak	8	12	
4.	Bunuh Sasaran Biasa	1	0	
5.	Bunuh Sasaran Pegawai	1	0	
6.	Pembaziran	6	12	
7.	Markah Sasaran Biasa	10	0	
8.	Markah Sasaran Pegawai	20	0	
9.	+ Bonus Penjimatan (Baki x 2)	24	0	
10.	Jumlah	54	0	
11.	Tolak Pembaziran (Pembaziran x 1)	6	12	
12.	Jumlah Besar	48	-12	

Rajah 2 : Kaedah Perkiraan Markah Praktis 2

butir, penembak menunggu di Tapak Tembak pada jarak 100 meter. Sasaran didedahkan sebanyak lima kali. Tiap-tiap kali sasaran didedahkan, lampu pencari (search light) akan menyuluh dari kiri ke kanan dan kanan ke kiri. Penembak menembak mengikut keselesaan sendiri.

- Perkiraan markah juga sama seperti di Rajah 1.

Ujian Raifal Peringkat II. Ini ialah ujian tembak tepat. Ujian ini bagi beberapa penembak yang terbaik dari Ujian Raifal Peringkat I. Dari aspek ketenteraan, ujian ini bertujuan untuk memilih penembak bagi tugas-tugas tembak curi. Mereka yang layak untuk ujian ini mestilah dari kalangan penembak yang boleh menahan tekanan-tekanan emosi, intelektual dan jasmani. Bagi maksud ini, praktis 1 sehingga 3 dalam ujian Raifal Peringkat I yang dilaksanakan sekarang ini boleh digunakan.



Mampukah beliau mempertahankan 'Kerusi Jaguh' apabila pelaksanaan kaedah baru ini?

Ujian Pistol Dan Serangan Seksyen. Mengambil kira keadaan dimana pistol akan digunakan ataupun "Serangan Seksyen" dilakukan, kaedah-kaedah tembakan seperti yang dicadangkan untuk praktis-praktis raifal boleh digunakan.

Ujian Lorong Hutan. Kaedah-kaedah Ujian Lorong Hutan perlu diubahsuai untuk memenuhi keperluan pertempuran di kawasan hutan dan bandar. Ini boleh dilakukan seperti berikut:

* Lorong Hutan I.

- Ini dikhususkan kepada suasana hutan.
- Sasaran dipelbagaikan termasuk pergerakan oleh binatang.
- Penembak dikehendaki memakai beg galas lengkap seperti dalam rondaan Operasi Unit Kecil dan dikehendaki berlari tidak kurang daripada 200 meter untuk mensimulasikan tekanan rondaan.
- Penembak diberi 20 butir peluru dan semasa berjalan dikehendaki menembak antara 10 dan 15 sasaran dimana 30 peratus daripada sasaran tersebut ialah sasaran bukan musuh ataupun dua sasaran dinaikkan serentak agar penembak membuat pilihan.
- Perkiraan markah sama seperti di Rajah 1 dengan sedikit tambahan bagi mengambil kira tembakan terhadap sasaran bukan musuh.

* Lorong Hutan II.

- Ini khusus untuk pertempuran di kawasan bandar. Lorong dan bentuk sasaran direka untuk mencerminkan kawasan bandar.
- Kaedah menembak dan perkiraan markah sama seperti kaedah Lorong Hutan I.

Ujian Raifal Terbuka. Ujian ini bertujuan untuk memberi peluang kepada syarikat-syarikat senjata api mempertandingkan kehebatan raifal mereka. Secara langsung juga ujian ini memberi kita maklumbalas mengenai kebaikan-kebaikan satu-satu jenis raifal yang ditawarkan oleh satu-satu syarikat itu. Syarat dan kaedah ujian adalah seperti berikut:

- * Syarikat yang berkenaan menyediakan penembak dan raifalnya sendiri.

- * Raifal mestilah berkaliber 5.56mm dan di dalam kategori senjata kecil.
- * Penembak dibenarkan menggunakan peralatan bantuan.
- * Kaedah ujian sama seperti Ujian Raifal Praktis 1 sehingga 3 dalam Ujian Raifal Peringkat I yang dilaksanakan sekarang ini digunakan.

RUMUSAN

Syor kaedah baru ini akan mengenakan tekanan-tekanan pertempuran kepada penembak-penembak. Secara langsung kaedah ini akan dapat mendedahkan kelemahan dan kebaikan bukan sahaja peribadi seseorang penembak itu tetapi juga keberkesanan pelaksanaan dasar-dasar latihan. Kaedah yang disyorkan ini akan menghasilkan penembak yang berfikir dan bukan penembak yang mempunyai minda mekanikal. Kaedah baru ini menekan kepada:

- * Kekuatan mental, fizikal dan emosi dalam tembakan pertempuran pada siang dan malam.
- * Berfikir sebelum menembak.

- * Menembak untuk membunuh.
- * Penjimatan peluru.

PENUTUP

UKM TD, sebagai satu aktiviti induk TD, perlu mempaparkan kehendak-kehendak doktrin supaya masa, tenaga dan perbelanjaan yang digunakan untuk mengatur dan seterusnya melaksanakan UKM TD tidak membawa kepada pembaziran. Hasil UKM TD mestilah produktif yang membawa kepada perkembangan doktrin sama ada dengan cara peningkatan teknik-teknik menembak ataupun rekaan alat bantuan menembak.

Anggota TD dilatih untuk bertempur. Oleh yang demikian UKM TD mesti menguji anggota TD dalam keadaan pertempuran. Piawaian (standard) UKM TD mestilah tinggi untuk memaksa penembak-penembak lebih berusaha bagi menghadapi cabaran masa hadapan.

Rujukan:

1. *Risalah UKM TD, Kod T 3112, 1982.*
2. *Arahan Am Pelaksanaan UKM TD 1996/ DIV/LATIH/1630/1 bertarikh 04 Jun 96.*



Brig Jen Mohd Aris bin Salim sekarang ini memegang jawatan Komander Artileri Divisyen di Markas 3 Divisyen Infantri. Beliau telah terlibat secara langsung dengan UKM TD sejak tahun 1994. Pada tahun 1994 beliau dilantik sebagai Pengerusi AJK Pertandingan UKM TD 1994 dan pada tahun 1996 beliau dilantik sebagai Timbalan Pengerusi JK Pengelola UKM TD 1996 dan juga Pengerusi AJK Pertandingan 1996.

ELECTRONIC WARFARE SUPPORT TO LAND OPERATIONS

BRIG JEN DATO' MOHD ZAKI BIN HJ WAN MAHMOOD

IMPORTANCE OF EW

Commanders of combat forces of today rely heavily on electronic devices, to acquire and distribute intelligence and to command and control forces, as well as to operate surveillance and weapon systems. Without this devices commanders are deemed to be less effective. It has been proven in recent wars that electronic devices have increased the ability of commanders in applying effectively their combat powers and influencing battles. This devices are force multiplier. However there are also susceptible to exploitations and disruptions by the enemy. This total dependency by commander on these electronic devices in battlefields and their susceptibility to enemy actions lead to the competition between two opposing parties, for the control of the atmosphere known as electromagnetic (EM) spectrum. Whoever gains control over the EM spectrum will have an edge over the others in applying combat powers through the use of electronic devices. This battle of controlling the EM spectrum is known as *electronic warfare (EW)*. It is an important warfare to modern military forces. To win any battle, a commander must first win his electronic battle.

Application of EW is a means by which a commander protects his own electronic systems, while attacking those of the opponents'. He integrates the passive activity of intercepting opponents' transmissions and the offensive activities of jamming and electronic deceptions. Simultaneously, he applies protective measures over his own electronic equipment and systems to reduce the effectiveness of enemy's EW passive and offensive activities.

The important roles of EW in the successful

conduct of past battles are well documented and recorded. The most recent war was in the Gulf. EW was used to neutralize the Iraqi electronic defence system, while enhancing the power of the multi-national forces. Similarly, 10 years earlier, during the Falkland War, the British forces EW capabilities overwhelmed those of the Argentinian forces. To the sides with superior EW capabilities and combined with their intelligent applications, victories were swift in both wars.

The roles of EW in determining success in wars are a foregone conclusion. Good knowledge of various facets of EW is utmost important for commanders and staff, less their forces will be destroyed even before they march to battlefields. A commander must be given EW capabilities to ever have a chance of winning any battle and all officers must be familiar with the employment of EW resources in support of land operations.

EW THEORY

It is imperative that the principles and characteristics of EW operations are first understood before one can visualise the span of EW activities. EW activities are military actions involving the use of radio energy to determine, exploit, reduce, prevent or deny hostile use of atmosphere, called the EM spectrum but retain friendly effective use of the spectrum. Every electromagnetic signal is a potential target for an EW attack by an adversary. EW targets are divided into two parts, one is that related to communications transmissions and the other is concerned with all other types of non-communications transmissions, mainly radars. The standard divisions of the EM spectrum into bands of military applications are shown in Diagram 1. A commander that has the total control over them will render the opposing helpless and he can

disruption efforts when ECM activities are to be applied. These information will allow countermeasures and counter countermeasures to be developed.

The information gathered, when analysed and collated is referred to as signal intelligence (SIGINT). SIGINT is further divided into communications intelligence (COMINT) for those derived from communications transmissions and electronic intelligence (ELINT) for those derived from non-communications transmissions.

It is possible to establish some valuable information on adversaries from ESM activities. The following information are obtained through COMINT efforts:

- * Identifications and locations of units and headquarters.
- * Composition and strength of the force.
- * States of readiness.
- * The force activities.
- * Future intentions of the force.

The ELINT, on the other hand, will provide information pertaining to locations and type of radars, which can indicate the level of associated units. This information when linked with COMINT can be invaluable in establishing the force electronic order of battle (EOB).

At army tactical level, these informations are used by operation and intelligence staffs to identify targets for neutralisation, destruction or exploitation. They are also used to create or modify an enemy's order of battle (ORBAT) in support of combat operations, as well as to create or modify EW database. The EW staff use the information to cue for other information gathering and to support the commanders' ECCM efforts.

The next activities of EW is ECM, which is

defined as those actions taken to prevent, deny or reduce the effectiveness of opponents' EM energy radiating equipment and to exploit any use of EM radiations. It is concerned with attacking the opponents use of the EM spectrum by either denying its use to him (jamming) or misleading him (deception).

Jamming is the use of transmitted EM energy to prevent or degrade opponents' receivers. It can only affect receivers, not transmitters. Jamming will isolate units and sub units from commanders and add to the confusion of war by disrupting the functions of command and control of commanders. Jamming can be targeted at communications as well as non-communications equipment and it is always controlled at the highest level.

The other ECM activity is deceptions. Its aim to insert false information into foreign electronic systems or communications networks, in order to mislead or create confusion and doubt. One type of deceptions is to imitate or simulate and adversary and transmit on his communications net, in order to obtain intelligence or to pass false and deceiving information. The other method of deception is to manipulate or alter signals or change its characteristics, such as to portray false traffic levels or false radar picture.

The third activity of EW is ECCM, which is defined as those actions taken to protect and to ensure friendly effective use of the EM spectrum, despite the enemy's application of EW. It is designed firstly, to avoid or minimise illegal detection of own emissions thus reducing the effectiveness of adversaries' ESM operations. Secondly it is designed to minimise the effect of foreign ECM attack or to counter ECM operations of the adversaries.

ECCM activities can be divided into non-technical and technical. Non-technical or tactical ECCM are organisational methods and tactics, used to thwart opponents' ECCM activities. Whereas technical actions are the use of ECCM electronic devices to minimise the effects of jamming and probability of detection.

EW THREATS AND COUNTERMEASURE

During peace time a nation does face considerable EW threats from potentially hostile countries as well as from friendly countries. Active EW threats are rarely made during peacetime. However, they cannot be precluded. Passive EW threats are another matter. They are to gain an advantage without being detected. Passive EW is intelligence gathering related. It is difficult to detect and is the most dangerous threat. It is practised throughout the year in peacetime, especially by advanced and powerful nations. A super power is known to have an organizations of hundreds of thousands of personnel involved in communication interception worldwide.

The methods of collection for SIGINT are many and varied, from the use of cheap receivers to the use of SIGINT aircrafts, as well as submarines,



innocent vessels, warships and auxiliary gathering of intelligence (AGI) vessel. For frequencies in the HF band (Long range communications), intercept receivers are located at distances away. However, for the VHF and UHF bands, which are line of sight communications, receivers have to get close to transmitters. Often they are disguised in innocent commercial ships or aircrafts. Innocent sea-going platforms commonly employed include fishing trawlers, merchant and research vessels, which can penetrate inconspicuously almost anywhere. Some seem to be ordinary ships until you see the

extraordinary number of antennas mounted on them. Of course naval combatant vessels do normally have SIGINT receivers as standard fits. Some of the commercial aircrafts known to be used for SIGINT activities are Cessnas, 707's and 737's.

SIGINT, in its own right, may not provide the total intelligence wanted, but it is valuable when correlated with information gained by other means. Peace time SIGINT activities are valuable assets in preparation for war, since war time threats are the extension from those of peace time. SIGINT from peace time collection are kept in databases with various ECM and ECCM options. These options are constantly being evaluated by EW support unit. They are transferred to databases of tactical EW units prior to deployment into battles and are used during initial stage of combat operations. Similarly, an adversary force in battlefields will have databases with relevant SIGINT data of our army formations and units.

Their tactical EW resources will continue to detect, intercept, locate and analyse our transmissions. Appropriate ECM efforts may be directed at us. Adversary's tactical EW activities in a divisional area are expected to be mounted by a tactical EW unit, supported by air EW elements. These army tactical EW units are as mobile as their supported formations. In some armies, independent EW units or sub-units are assigned to field commands and in others, EW subunits formed part of a divisional signal or intelligence units.

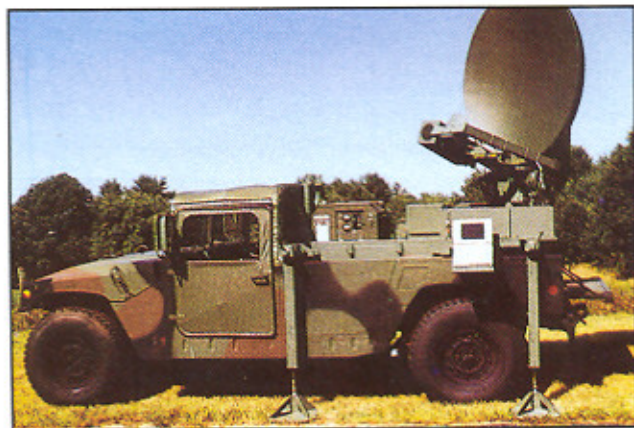
How to counter these threats? The best countermeasure to the passive threats is to implement an electronic silence. If we apply this all the time, there would be no SIGINT given away. Unfortunately, this is not practical, neither possible nor desirable. However, we can minimize the SIGINT risk by an intelligent use

of our electronic and communications system. A key countermeasures, in EW is the proper application of transmission security. Physical, transmission and cryptographic security require constant attention. One has to accept the fact and remember that someone is always listening or intercepting our transmissions.

Good communications security practices will safeguard communications transmissions. Some of the most common practices are the use of codes and ciphers. Authentication is a weapon against deception. Changing of frequencies, callsigns and locations will hinder ESM operations of the adversaries and the use of address groups will camouflage identities of units and formations.

Another effective countermeasure is to use equipment sensibly. It is most appropriate to use the lowest power output possible so that ranges of transmissions are limited to the required distances. Similarly, an appropriate antenna with correct direction, polarity and propagation will obstruct illegal listening in to own transmissions. Remotting transmitters, distant locations of antenna and the use of rebroadcasting will deny the opponents from knowing the exact locations of units and headquarters.

There are two other protective measure, one is radio and electronic silence and the other is emission control (EMCON). Under an EMCON plan, a commander implements a plan to determine which equipment may transmit when and under what conditions.



Raytheon's SMART-T mobile anti-jam reliable tactical terminal

So much for countermeasures against passive EW threats. There are also requirements for countermeasures against enemy's use of active EW, which is either jamming or deceptions on communications and non-communications system. The good thing about active EW threat is that you know exactly what effect it is having on your system and where it is coming from. A major and an effective countermeasure is the use of a sound signal instruction, one that is easily understood by operators. A signal instruction includes an anti-jamming procedure which is the main defence against jamming, including switching to high power, changing antenna, varying antenna propagation and polarity or changing transmission medium, from VHF to HF.

An important guidance on non-communications ECCM is for the operators to know defensive EW techniques as well as to be prepared to use alternative means. These non-communications equipment, such as radars and distance measuring equipment, their effectiveness rely on clear line of sight to targets. These equipment can be sited to cover a narrow arc and can be defiladed to screen from enemy EW actions. Weapon locating and meteorological radars must be deployed to give overlapping coverage and supported by the correct use of listening posts. Transmissions of radars are kept to a minimum and they are only switched on when necessary. Drones and unmanned air vehicles used for surveillance over battlefields must be electronically protected for they are vulnerable to EW actions.

Navigational beacons used on landing strips and dropping zones must have ECCM protection. They may be required to operate for long periods and are therefore vulnerable to enemy's direction finding activities.

SUPPORT IN LAND OPERATIONS

EW activities in support of military operations are with three missions. One is to protect own systems, the other is to gather information and the third is to disrupt the enemy systems. The protection

missions is the application of ECCM onto own electronic systems. It is the responsibility of everyone who uses or supervises the use of radios or other electronic equipment. The first on the priority list of EW activities for commanders is to protect own electronic emitters from detection, locating and identification by adversaries. Communications and weapon systems cannot survive in battlefields if they can be located and identified.

The second EW support mission is the application of ESM for information gathering. ESM is one main source of information available to commanders. The intelligence derived is likely to give enemy's ORBAT, potentials and intentions. However, the third mission is to disrupt the use of electronic systems by adversaries through electronic jamming. Deception is also part of degrading activities and is accomplished by feeding false or misleading information to foreign electronic sensors. Therefore in battlefields commanders can expect from EW effort benefits of having knowledge of the battlefield and the ability to deny intelligence to the opponents. Through the use of EW assets enemy command, control and communications (C3), radar and weapon systems may also be disrupted while maintaining the integrity of own operations.

An army formation in the field is expected to be supported by an EW unit, which has ELINT, COMINT and jamming capabilities. The unit will also have a mobile electronic warfare coordinating centre (EWCC) and self supporting logistics and maintenance capabilities. The EWCC will perform the functions of control and coordinating of EW operations as well as analysis of EW data.

At an army HQ and EW Support Centre (EWSC) will perform the functions of planning, development and databases management. The success of army EW operations will be influenced by the effectiveness of this EWSC. The centre will ensure that the army is in pace with the potential adversaries as well as with the technologies. It will collect all EW data of the adversaries, the develop, the develop system, hardwares, softwares, doctrines, procedures and tactics

to out-maneuvre them. Subsequently, the army units and formations are equipped accordingly. Then only the army is really ready for war.

In any operation, planning is guided by some principles. Some of the EW planning principles commonly used by most armies are discussed here to reflect that EW planning is a serious matter.

* **Maintenance of the Aim.** Successful EW operations is fundamentally dependent on the achievement and maintenance of the aim of controlling that portion of the EM spectrum, which is most important.

* **Offensive Action.** To achieve EW full potential, ESM and ECM offensive operations must be planned and executed as an integral part of the battle. Maximum shock effect is achieved through a well coordinated jamming and deception. Initiative must be acquired, then only one is able to dictate to the enemy on the use of their electronic devices.

* **Concentration of Force.** Maximum EW assets are pooled onto specific targets. Since resources are limited, targets have to be allocated based on priorities which are to be decided by the commander.

* **Economy of Effort.** While having concentration of EW resources available to commanders, it must be limited to just sufficient to have the desired effect over a given target. Detailed planning and effective control are necessary towards the achievement of this principle.

* **Surprise.** Information on own EW capabilities and intentions must be safeguarded. If an enemy is surprised by our EW applications, then we have a better chance of achieving success.

* **Security.** Security of information on all our EW assets and EM emitting equipment, as well as their doctrines, tactics and procedures must be assured, so that their applications are guaranteed uninterrupted by the enemy.

* **Unity of Effort.** Land, sea and air as well as strategic EW operations must be mutually supporting towards the achievement of the aim. Coordination and control are done at the highest level and information in databases are shared between EW organizations.

* **Mobility.** EW system survivality and its ability to provide sustained support in a fast moving operation are directly affected by its mobility. Therefore EW systems placed in support of a command must be as mobile as the supported command. Mobility also provides flexibility in its deployment.

* **Simplicity.** EW operational orders must be simple as well as easy to be implemented. Simplicity backed by thoroughness will ensure success.

EW planning follows the normal staff planning process. It begins with the mission statement and the commander's planning guidance, which leads to the development of EW appreciation and orders. Planning is based on the planning principles mentioned earlier as well as on some basic considerations. Some of these considerations are discussed here.

* **Priorities.** The commander will establish priorities EW targets.

* **Responsiveness.** Assets must be able to react immediately.

* **Flexibility.** EW activities must be prepared to change direction, pattern and asset to maintain control over the EM spectrum.

* **Readiness.** Assets are always in a state of alert and ready for action.

* **Survivability.** Adequate planing, logistics, integration and reserves will avoid EW capabilities from total destruction.

* **R & D.** Continued research activities in

peace and in war are necessary for the success of EW operations. R & D activities by EW units will avoid from being caught by surprise by adversaries.

* **Training.** Training and rehearsals are keys to success.

* **Others.** There are others that may considered, such as mission, coordination, threats, assets, impacts, timing, etc.

Targets for offensive EW (ESM and ECM) operations are selected based on operational requirements of a commander. Critical enemy nets and emitters are identified and targeted for electronic attack. Given in diagram 2 is an example used by some armies, of some possible electronic attack options available to a commander.

Command and control of EW assets by a commander is exercised through an EWCC, a critical element in accomplishing EW missions. Divisional headquarters and above are normally provided with an EWCC. In some cases EWCC is made available to a brigade. It reinforces operational, intelligence and signal staffs with the necessary expertise to perform the detailed planning, target selected and coordination that are requisite for EW operations. EWCC assesses both the enemy vulnerabilities and own capabilities against own missions. Then it identify those enemy nets and emitters that pose the greatest threat. These target are assigned a level of priority and determined by the commander for attack either by fire, manoeuvre, jamming, deception or intercept.

Control and coordination of EW activities will start at the beginning of the operational planning, based on the commander's mission and his planning guidance. EW staff prepare appreciation to determine the best EW course of action to support the commander to accomplish his mission. An EW plan is drawn up, then it is transformed into orders to be executed by EW units.

Types of Targets	Enemy First Echelon					Enemy Second Echelon		Enemy Rear	
	Distance from forward line of own tp (km)								
	0-3	3-6	6-9	9-15	15-20	20-30	30-50	50-100	more than 100
Comd & con comm	Intercepts, locate & jam			Intercept & locate			Intercept		Intercept
Arty comm	Locate & jam				Locate		Locate		Locate
Air def comm	Locate & jam				Locate		Locate		Locate
Int comm	Intercept, locate & jam		Intercept & jam		Intercept		Intercept		Intercept
Log comm	Intercept & locate				Intercept		Intercept		Intercept
Air def radars	Locate & jam				Locate		Locate		Locate
Gnd surveillance radars	Locate & jam			Locate			Locate		Locate

Diagram 2 : Electronic Attack Options

During the planning stage an EWCC is supported by the electronic warfare support centre (EWSC) of the army headquarters.

In joint operations, it is similar, except that naval and air assets are available as well. Once a joint task force headquarters is established, joint EW coordination centre (JEWCC) will be formed. The JEWCC is the agency through which the joint force commander (JFC) and his staff relevant EW data and information and by which the JFC controls all aspect of EW operations affecting the joint force. However, single service will have its own EWCC, EW units, tasks and responsibilities. Each subordinate EWCC is allocated detailed tasking of EW assets in accordance with joint force EW plan and single service requirements, as approved by JEWCC. When a joint operation is in progress, EW activities are very much single service efforts but coordinated. Coordination is done by JEWCC but control is done

by single service EWCC.

Throughout an operation, various EW activities are evaluated regularly and reviewed to strive for maximum effectiveness. The role of the commander is utmost important. He is the driving force to maximise his EW resources.

Prior to launching a joint operation, the EWSC at the armed forces headquarters will assist the JEWCC on formulating an EW plan. The following information on the enemy are normally provided by either the JEWCC or the EWSC, as appropriate:

- * Radio nets, codes and cipher systems.
- * EW assets, capabilities and likely threats.
- * Surveillance systems and electronic parameters, to include missiles by tapes, platforms as well as control systems, ECM and ECCM capabilities.
- * Various measures to counter EW threats.

EW IN FOUR PHASES OF WAR

As mentioned earlier, the application of EW in battlefields covers ESM, ECM and ECCM. ESM activities of interception of enemy communications in a battlefield is a tedious activity. Intercepts are done to obtain COMINT and ELINT. Valuable SIGINT data can only be effectively obtained by well trained EW operators. Any breach of communications security (COMSEC) and transmission security by the enemy would assist in these intelligence gathering activities. Capture equipment, documents and prisoners of war are good leads to intercept works.

Next activity in ESM is the radio direction finding (RDF), which is used to locate the enemy emitters. Each radio station will denote a headquarters. The only aspects which is not known is the level of the headquarters, which is verified by reading texts of messages. ELINT station on the other hand, will locate and identify radars. From the result of ESM activities, a commander will have three options. He may continue to intercept to obtain more intelligence, during which time the enemy may obtain a significant advantage. Alternatively he may apply the ECM activities by jamming or deception. His third option is to attack and destroy the enemy's sources of emission. To apply countermeasures (ECM) or to attack are normally coordinated at the highest level, so that the superior commander can distribute his EW asset and weapons according to his priority of targets.

The application of EW in all the four phases of war involves all the three divisions of EW activities. The difference is in its priority, which vary from phase to phase. In defence, concentration of EW is in ECCM and ESM. ECCM will protect own communications and air defence systems, as well as ground surveillance radars. Line communications are extensively used.

ESM activities are to intercept enemy communications and to locate his communications and non-communications emitters, to obtain near real time intelligence. The use of jammers is not recommended before the enemy launches his attack.

During an attack, intercept and RDF stations are active during the planning stage to obtain enemy's defence layout. Electronic deception is an advantage to own troops and it is a part of the commander's overall deception plan. Once attack is under way, jamming of enemy communications, surveillance and weapon systems will confuse the enemy and our RDF activity will concentrate on location his jammers and weapon control centres. ECCM efforts are important and will be maintained throughout. During this phase, combat radios are extensively used and ECCM practices are therefore utmost important.

In an advance phase of operations, intercept and RDF activities will take precedence, to build up intelligence on the enemy's ORBAT, EOB as well as his plan and defensive positions. ECCM will be maintained throughout as protective measures. Electronic deceptions are applicable but jamming is not likely.

The withdrawal phase of an operation is the most difficult, especially if the enemy is in hot pursuit. As the situation is very fluid, jamming may be extensively used to disrupt the pursuing enemy's command and control as well fire support communications. Our RDF efforts will be closely linked to fire control centre, to locate the advancing enemy. ECCM is difficult but it is still required. However, if the withdrawal is not subjected to enemy activities, intercept and RDF activities will be the priority. Electronic deception is to be planned and jamming will be on a standby to support the withdrawal.

ASPECTS OF STAFF DUTIES

Officers need to be aware how EW operations are planned. The efficiency of the EW staff depends heavily on the support accorded to by other staffs. Close rapport and liaison between these staffs are utmost important. Some functions of one staff are related to another. The efficiency of intelligence, operational, EW and communications staffs are necessary to ensure victories. Given in diagram 3 are some functions which are related or similar to between one staff and the other:

Once hostilities break out, EW missions will be considered. Upon receipt of a mission from the commander, EW staff begins planning in accordance with step 2. Targets for counter C4 operations are determined by identifying the enemy communications links with the intention of degrading it. Once this planning is completed the plan will be executed in step 3. During step 3 a system of feedback must be established to provide information to the EW staff for evaluation.

In step 4, the EW staff, in conjunction with operational and intelligence staffs will evaluate the

S/NO	INT	OPS	EW	COMMS
1.	Int Appr	Int Requirement	EW Deployment	Issue Freq List
2.	Collection Plan	Sig Sec	EOB Revision	EMCON Plan
3.	EOB Prep	Counter C4 Plan	En ORBAT Revision	Elec Deception
4.	EW Threat	Concept of Ops	En Deployment Revision	COMSEC
5.	En ORBAT	Security Ops	Database Update	Radio Silence
6.	EN Deployment	Deception Ops	EW Appr	Elec Silence
7.	Database Upgrade	OpO	EW OpO	Sig OpO

Diagram 3 : Staff Functions

To ensure the effectiveness of EW applications, there are operational procedures which are adhered to by EW staffs at various levels. Given at diagram 4 is an example of some steps which are likely to be taken by an EW staff and units.

Step one is the strategic peace time intelligence gathering and the establishment of a database on foreign forces electronic systems. These data at base EWSC contain information on potential enemy C4 structure, procedures, techniques and equipment used in operations. The database also contains attack priorities to counter enemy C4 for various type of enemy combat operations.

effects of the initial counter operations and adjust or determine new targets as necessary. Further counter operations will be planned and executed in step 5.

While we are mounting our ESM and ECM activities, the enemy is doing the same. We need our ECCM to protect our own communications and radar transmissions from being intercepted and degraded by the enemy. Communications protection is achieved by using more secure means of communications such as lines, frequency hopping radios, burst transmissions, coupled with sound practices, procedures and codes. There are similar ECCM for radars and most of these measures have already been discussed.

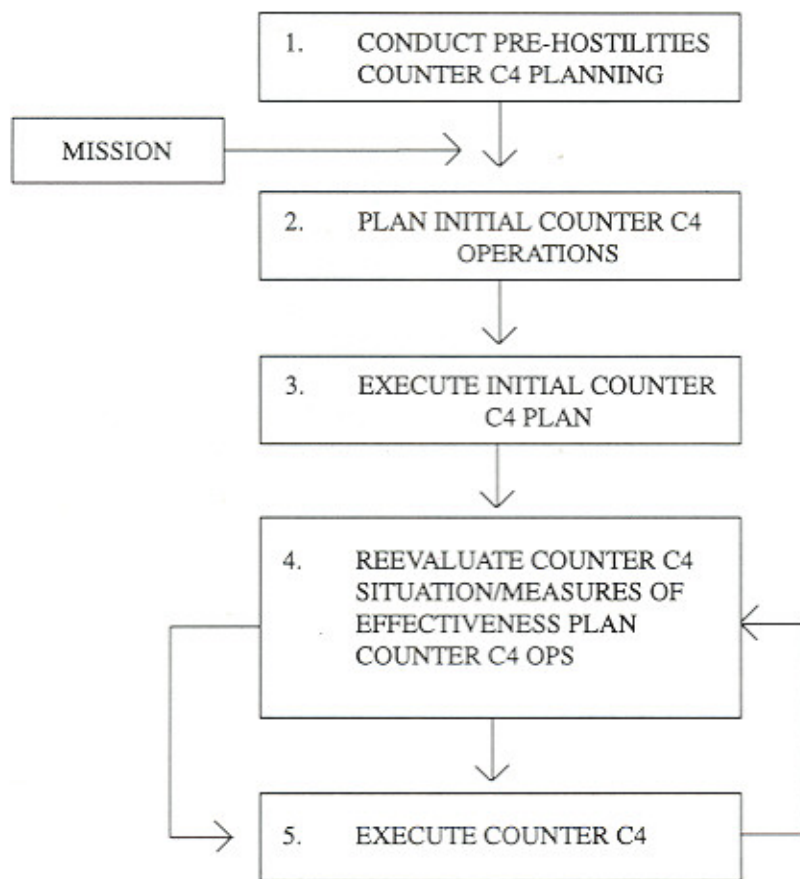


Diagram 4 : EW Operational Procedures

SUMMARY

EW is a warfare to control the atmosphere called the EW spectrum, which is the space used for the transmissions of radios, radars and other electronic devices essential to the armed forces during peace time as well as in battlefields. To achieve EW superiority military forces strive to intercept all transmissions of interest to gather intelligence, disrupt those transmissions critical to opponent's missions at crucial times, while ensuring effective use of our own EM radiating devices. The army forces of present and future days will only survive in battlefields if they are supported by EW units.

EW activities are applied by specialist EW staff

and organizations at all times. Peacetime EW efforts help commanders to prepare for war and wartime applications ensure victories. All officers and men must be aware of the importance of EW, since everyone is a potential user of any of the defence electronic devices. Carelessness on the part of the users will render those electronic devices, not only ineffective but dangerous to own troops, much to the delight of the opponents and at expense of own lives. It is not always possible to identify culprits but their uncaring attitudes towards these devices could be the cause of humiliating defeat of own troops.

EW is one of the most important contributors to battle victories. Whoever wins the EW battle will win the war. Victory in any future war will definitely

go to the side that can best control the EM spectrum. Such statements as *"if you lose the EW battle there is no hope of winning the main battle"*, and *"the next war will be won by the side which best exploits the EM spectrum"* are most accurate.

EW is a weapon as well as a force multiplier. Though EW cannot take or hold ground, destroy a tank or aircraft, nor repel and attack, it can, when integrated into the overall concept of operations, provide intelligence to the commander, as well as confuse, deceive, delay, disorganize and target the enemy. When other considerations are equal, victory may only go to the force that use EW effectively. One has to remember that *"you may not win a war with EW only, but you will not win one without it"*.

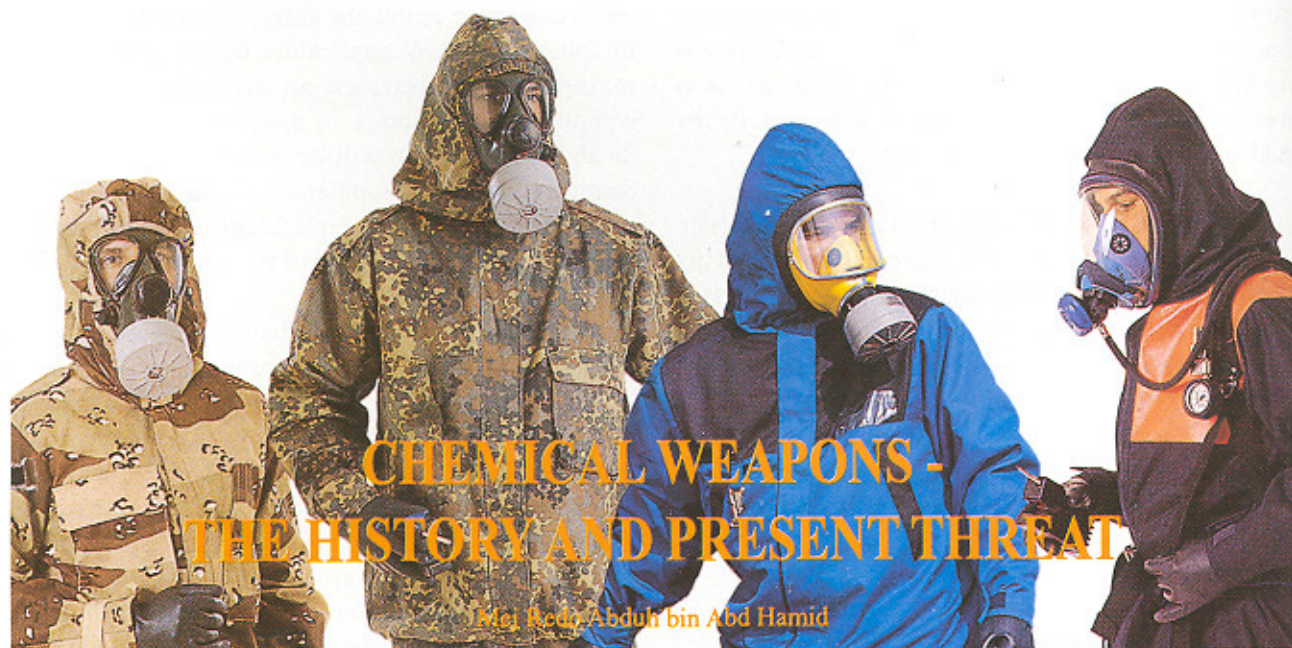
To wage an EW, an army must be capable of exploiting to its own advantage of any use the enemy may take of his electronic equipment. EW capabilities

are necessary to enable the army to function tactically, in spite of any EW application by adversaries. No matter how well-armed an army may be, with equipment and weapons for destruction of every sort, its ability to function will be severely disrupted if its command, control, computer and communications and all other EM radiating equipment are exploited or disrupted by EW activities of the opponents.

It is firmly believed that applications of EW in modern battlefields are of paramount importance. These applications are most effective when it is well coordinated with operational plans. Therefore, in all their plannings and operational undertakings, commanders and staff at all levels must be conscious of the impotence of EW and methods of applications to realize EW as a major contributing factor in determining the outcome of a battle. It is further believed that without EW you can never hope to win a war, but with EW you are assured of not losing one.



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SINOPSIS

Chemical weapons are almost as old as the war itself. There is evidence that poisonous substance were used long before the First World War (WW 1). However, it was not until the WW 1 that chemical weapons were first used on a large scale. Thereafter, scientists and technologists were developing it into more sophisticated varieties which have become fully integrated components of security policy doctrines and military tactics.

Eventhough there are several negotiations on the total ban on chemical weapons, several important questions remain to be answered. Iraq's acquisition of chemical warfare (CW) arsenal illustrated how difficult is to effectively prevent chemical weapons from dispersing to other countries. The destruction of the vast quantities of CW agents stored in USA and Russia will be a major problem and requires at least 10 years to complete.

INTRODUCTION

The enormous threats posed by nuclear arms, in a way distracted public attentions from the existence of huge arsenals of chemical weapons (other means of mass destruction), whilst scientists and technologists kept developing the latter into sophisticated varieties.

A large-scale use of modern chemical weapons can be disastrous. Way back in 1969, the UN Secretary General had this to say in his report: "Advances in chemical and biological science, while contributing to the mankind, have also opened up the possibility of exploiting the idea of

chemical ... chemical weapons, some of which could endanger man's future, and the situation will remain threatening so long as a number of States proceed with their development, perfection, production and stockpiling".

The very same report defines chemical warfare (CW) agent as "... chemical substances, whether gaseous, liquid or solid, which might be employed because of their toxic effects on man, animals and plants...". The Chemical weapons Convention at the Conference on Disarmament in Geneva, states that the term chemical weapons must cover not only toxic chemicals but also ammunition and equipment for their dispersal.

HISTORY

SITUATION UP TO THE SECOND WORLD WAR

The earliest use of poisonous substances in warfare was during the Peloponnesian War (400 BC) where the Spartans burnt sulphur to form sulphur dioxide which then swept in over the besieged town of Plataea¹. In the same area, about 2,300 years later (1949) a similar method was used to force guerrillas out of hiding in caves.

For many years chemical weapons were considered neither applicable nor suitable in military contexts. One reason for this was the inability to manufacture large amounts of poisonous substances at reasonable cost, another being a certain degree of consideration towards indignity. Nonetheless, the developments in modern chemical industries during the late 19th Century have changed the situation.

The history of chemical warfare took a turning point when a curious, single rather pathetic German scientist who performed extraordinary feats of invention to save his fatherland, and in the process gave us chemical warfare as we knew it half a century later. In appreciation of his patriotism he was given the greatest honours by one German government and then was victimised by the next for being a Jew. Dr. Fritz Haber, a Jew, who found a way to combine nitrogen and hydrogen under pressure, using iron as a catalyst to form ammonia and the ammonia could then be converted into fertilizer or explosive, was appointed the director of Berlin's Kaiser Wilhelm Institute of Physical Chemistry and electrochemistry in 1911². Later, on the eve of First World War (WW I), he was made the head of Germany's chemical service. Initially, his idea in using poisons in combat was not accepted by the generals of the German Imperial Army but all

these changed after the British naval blockade, which cut off the Chilean nitrates (raw resources to make gunpowder/explosive) supply, and only six months' worth of explosive left³, when a crash programme was launched to adapt I.G. Farben's manufacturing plant from fertilizer production to that of gunpowder. This programme came under the direction of Bureau Haber, putting Fritz for the first time in a powerful position where he had the undivided attention of Germany's generals. As the gunpowder project neared success, Haber went before the generals with some additional ideas on how to break the deadlock at the front. He suggested that the enormous quantities of poisonous chemicals generated by the dye industry could be used as a devastating new weapon. The idea was distasteful to the generals, but in their frustration they were willing to permit an initial test.⁴ Fritz Haber, in charge of the

German chemical organization, worked out strategy with the general staff and commanded the vast resources of I.G. Farben, and trained his own chemical corps pioneer in field use. At his urging, in Feb 1915 cylinders filled with condensed chlorine were placed along the eastern front and Ypres⁴.

"If a guerrilla feels in the jungle like fish in the water, then fish must be left without water and it will die"

But not until 22 April 1915, the Germans made a massive gas attack at Ypres in Belgium. A total of 150 tons of chlorine gas were released from 6,000 cylinders along a front extending over several kilometres and allowed to drift in over the Allied Forces. The immediate effects of this attack were devastating but could not be fully utilized militarily. The method of releasing the gas was soon replaced by chemical-weapon-filled artillery shells but they were not decisive for a knockout blow. The Germans thought they had found the answer in Phosgene, another Fritz Haber's potion from the I.G. Farben dyestuff pharmacopoeia. Phosgene was introduced in late 1915 and on 12 July 1917, the Germans introduced mustard agent, showing the endless inventiveness of Fritz Haber and his team at

1 Fyodorov, Yuri, "Silent Death", (Moscow, Progress Publishers, 1978) pp.10.

2 Seagrave, Sterling, "Yellow Rain", (London, Abacus, 1982) pp.47.

3 Ibid, pp. 48-50.

4 Fyodorov, op. cit., pp. 11-12

the Bureau Haber, and I.G. Farben's chemical closet. Both of these agents were also used for the first time at Ypres. A year later Britain started to use these agents and France and the USA quickly followed suit.

About 1.3 million people were injured and 100,000 killed by chemical weapons during WW 1. These figures only refer to acute cases, and do not include the unknown number of long-term injuries ranging from "chemical Pneumonia" to cancer caused by mustard agent. After WW 1, there were strong antipathy to chemical weapons and in 1925 the Geneva Protocol was drawn up which prohibited the use, but not possession, of chemical and biological weapons. The protocol was quickly ratified by all major states except USA and Japan, but generally the right to use chemical and/or biological weapons in retaliation to an attack with such weapons was retained.

Nonetheless, during the 1930's, research was carried out in Germany, into new and more effective insecticides. Dr. Gerhardt Schrader, working in Bayer Research Laboratories of I.G. Farben, was testing the effectiveness of various organophosphorous compound on insect pests when in December 1936 he discovered by chance a compound that proved highly toxic to mammals, and this led to the development of nerve agents. Tabun was produced on 22 December 1936 and started to be manufactured industrially in 1939 under the assumed name of Trilon, a detergent. Three years later, in 1939, he isolated an even more potent nerve agent, Sarin. During the Second World War (WW II), a total of thousand of tons of Tabun was produced, together with smaller amounts of Sarin.

In 1936-37, Italy used both tear gas and later, also mustard agent in the war against Abyssian/Ethiopian when their troops were bogged down. The Italian took 700 tons of tear gas, mustard agent and possibly phosgene into Ethiopia, and that of 50,000 Ethiopian army casualties, 15,000 were caused by chemicals⁵.

THE SECOND WORLD WAR AND UP TO THE 1970'S

Despite the German monopoly of nerve agents (the US Army chemical warfare stocks were 500 tons of mustard gas and the German arsenal consisted of 12,000 tons, 80 percent of which was mustard) they never attempted to use chemical weapons. This is because their own protection against chemical weapons was poor and in addition they were convinced that the Allies also had supplies of nerve agents. Another factor, perhaps the most decisive in the end, was Hitler's personal abhorrence for gas⁶. As a German army messenger during WW 1, with the rank of corporal, Hitler had been on a courier mission along the western front not far from Ypres when he was suddenly enveloped by a chlorine cloud and was nearly asphyxiated by fumes. He had ended the war as a casualty of poison gas attack recovering in a hospital from the effects - a horrifying experience - the memory of which never left him.

On the other hand, the Allies did not use them owing to the fear of German retaliations, as well as incorrect intelligence report on the German chemical weapon protection and also the lack of military knowledge on how the chemical weapon should be used.

After the war, the German stocks of chemical weapons were taken over by the Allies. The Soviets captured the Tabun factory at Dyhernfurth near Breslau (now called Wroclaw in Poland) with 12,000 tons of tabun still in the factory. By 1946, they had made the Dyhernfurth plant operational again and later it is believed that they had dismantled the plant and moved it to the Urals. They also captured a plant producing Sarin at Falkenhagen, near Furstenberg on the Oder River southeast of Berlin.

Although figures do vary as to which country got precisely what from Germany, French officials have

5 Fyodorov, *op. cit.*, pp. 15-16.

6 Seagrave, *op. cit.*, pp. 78.

stated that 13,500 tons of nerve agents in all were captured by the American, British and French forces in the parts of Germany that they conquered, the south and west. A total of 12,000 tons of Tabun were seized by the Soviets at Dyhernfurth.

In the late 1940's, the British colonial troops in Malaya made a wide use of herbicides to destroy the jungle where the communist terrorists were hiding. British General Robert Thompson, who was in charge of using these means in a manner befitting the military, clearly and briefly stated, "If a guerrilla feels in the jungle like fish in the water, then fish must be left without water and it will die"⁷. His troops not only destroyed the jungle but also crops to leave the terrorists without food.

In China, Chinese sources reported 889 chemical weapon incidents initiated by the Japanese Army in the period from August 1937 to 1939. They also, through the Manchurian 516 Unit together with Unit 731⁸, experimented extensively with various types of chemical ammunition and toxic agent, using on the Chinese, as a guinea pig, in varying situations and for different purpose.

A new generation of nerve agent, the V agents, was developed in USA during the 1950's as a result of determined searches for increasingly toxic compounds. The development of chemical weapon was discontinued after an accident at Dugway, Utah, in 1968 when 6,000 sheep were poisoned near an experimental area where the nerve agent VX was released accidentally⁹. It was not until the late 1970's that the USA resumed development of binary chemical weapon agents.

The erstwhile USSR reasons to VX was a new agent of their own. They apparently did not adopt the V agents, but found a way of thickening their own soman agents so that it would not evaporate so quickly.

This oily form of soman, code name VR-55¹⁰, was able to persist on battlefield for a number of weeks, like VX. Thereafter, the American arsenal of nerve agents was composed primarily of sarin and oily VX, while the USSR stocks apparently were primarily soman and oily VR-55.

It was also reported that chemical weapon agents, probably VR-55, was used in Yemen by the Egyptian during the civil war in 1963-67¹¹. Twelve days before the outbreak of Six-Day War in June 1967, Israeli intelligence reportedly discovered the existence of a stockpile of Soviet nerve gas, VR-55, in the Egyptian-held Sinai Peninsula, in artillery shells ready for use.

During the years 1962-71, USA used large quantities of herbicides and tear gas in Vietnam. Though 'Operation Ranch Hand' - whose unofficial slogan became: 'Only we can prevent forest', an area of 20,000km² was sprayed with 80 million liters of herbicides in order to remove foliage and to destroy paddy fields. Four agents were used, each designated by colour coding - Agents Orange, White, Purple and Blue. The most "famous" chlorinated phenoxy acids were 2, 4-D and 2, 4, 5-T. Herbicides were also sprayed in Laos in 1965-69 but on "smaller" scale (600km²).

THE 1970'S AND LATER

During the late 1970's, there were reports that



NEWP - Protected Remote Control

7 Fyodorov, op. cit., pp. 33-34

8 Williams, Peter and Wallace, David, "Unit 731, The Japanese Army's Secret of Secrets", (London, Hodder and Stoughton, 1989), pp. 45-50

9 Seagrave, op. cit., pp. 105-106

10 Ibid, pp. 93-94

11 Ibid, pp. 128

Vietnam had chemical weapons in Cambodia against the Pol Pot guerrillas. Similarly, it was reported that the Laos government had used weapon chemical agents against H'Mong, an isolated mountain people living in central Laos, which they called "Yellow Rain". In a speech in Berlin in 1981, US Minister of Defence, Alexander Haig, asserted the "yellow rain" at least to some extent consisted of mycotoxins of Soviet origin. The United Nation conducted an investigation in 1981-82, despite opposition from the USSR, Vietnam, Laos and several other countries, but without reaching any conclusive results.

In Afghanistan, the USSR used chemical weapon agents against the Mujahideen. Tear gas and incapacitant agents including the psychochemical of the BZ type agents and new Soviet "Blue-X" gas¹², which knocked victims out harmlessly for 8 to 12 hours, allowing them to disarm and capture the Mujahideen, were widely used. Lethal agents were only being used in remote areas such as Badakhshan - where it was unlikely that reports or witnesses would reach the outside world, and on a severely restricted basis, in Konarha and Paktia provinces. On January 1980, a chemical agent, reportedly with the same effect as the one used in Laos against the H'Mong, were used in Feyzabab which caused vomiting, constriction of the chest, blindness and paralysis. The same chemical weapon agent was used on 29 January 1980 near Beharak in Badakhshan.

During the autumn of 1983, there were increasing reports from Iran on the use of chemical weapons by Iraq during the Iran-Iraq war. In early 1984, Iran sent about 30 mustard agent casualties to different European and Japanese hospital for treatment. Initially, the chemical weapon agents used by Iraq were mainly mustard agent and lesser amounts of nerve agent, Tabun, which were regarded as defensive attempts to stop the advance of Iranian army. However, when Iraq started to manufacture and make use of more volatile nerve agent, Sarin, the use of chemical weapons achieved a much more offensive character. A turning point in the war was the attack against Kurdish town of Halabja in March 1988,

where 5,000 civilians were killed mainly by nerve agents¹³.

During 'Operation Desert Storm', the liberation of Kuwait by United Nations Alliance in January - February 1991, there was considerable fear that Iraq would use chemical weapon. There was particular fear and panic in Israel that 'Scud' missiles with chemical agents warheads would be used by Iraq. However, there were no attempts by Iraq to use chemical weapon agents, probably out of fear of nuclear retaliation, inability to localize chemical weapon targets and to carry out chemical weapon attacks and other reasons unknown to the Allied forces.

After the Gulf War, the United Nations Security Council adopted a resolution, Resolution 687 dated 3 April 1991, that all Iraqi chemical warfare weapons and other weapons of mass destruction must be destroyed. It

was later that the chemical weapons programme was extremely comprehensive. At a large plant at Al Muthana covering 25 kilometre square, about 80 km northwest of Baghdad, mustard agent and nerve agent tabun, sarin and soman had been manufactured and loaded into ammunition. The production was largely based on imported raw materials but the Iraqi production was on the point of becoming self-sufficient.

The number of states, possessing chemical weapons or seeking to possess them, has grown from about five in the early 1960's to about 12 or 16 in the mid-1980 and to over 20 by 1989

PRESENT THREAT

The United Nations resolution on the destroying all Iraqi chemical weapons and other mass destruction weapons exposed and shocked the whole world with the large amount of deadly chemical weapon agents possessed by the Iraqi and their capability to produce it in large quantities and use it as a weapon. Before this, it was not known, not even to best and well trained and equipped intelligence organizations such as CIA and MOSSAD. This shows that chemical weapons can be developed in secrecy. One

12 Ibid. pp. 132

13 Hiro, Dilip, "Desert Shield to Desert Storm", (London, Paladin, 1992), 0. 53.

reason for this that many household substances used during peacetime can also be used as chemical weapon agents. This applies, for example, to certain pesticides and semi-manufacturers in the chemical industry. These can be used as chemical weapon agents, particularly if the enemy has no chemical protection. The amounts required for military use may be negligible compared with normal peacetime needs and the cost of equipping existing weapon systems with chemical ammunition are marginal. That's why it is dubbed as the "Third World Country 'Nuclear' Weapon".

The proliferation of chemical weapons within regions of the Third World has been a source of increasing concern since the mid-1980s¹⁴. Strategically, some of these countries may seek a chemical weapon capability as a "force multiplier" to offset the more powerful conventional force of a rival.

In general, the number of states, possessing chemical weapons or seeking to possess them, has grown from about five in the early 1960's to about 12 or 16 in the mid-1980's and to over 20 by 1989¹⁵.

AIM AND METHOD OF THE AGGRESSOR

Chemical weapons can be used as alternatives or supplements to both conventional and nuclear weapons. They have the ability to affect only human beings, animals and plants, yet leave terrain and buildings practically undamaged. Three main reasons for the use of chemical weapon agents are : *to disable the enemy within relatively restricted area by killing or by more or less severely injuring him, may be to prevent or delay certain activities within restricted areas and only achievable under suitable weather conditions, may be to disturb or exhaust personnel within large areas by compelling them to wear respirators or to remain in gas-proof chambers*

for lengthy periods. The mere threat of an attack involving chemical weapon agents may imply both physical and mental strain.

Attacks by chemical weapon agents can be made in different ways, depending on the objective of the attack and the nature of the target. It can be either released in liquid form, as gas or aerosol. In actual fact, a combination of liquids, aerosol and gas occurs in all forms of dispersal methods but the appropriate choice of the type of substance makes it possible to achieved the desired type of dispersal, the dominant one.

Chemical weapons are mainly suitable for tactical or operational employment. More comprehensive strategic attacks require large quantities of chemical agents as well as suitable weather conditions. Consequently, chemical weapon agents are judged to lack significance in strategic contexts apart from functioning as a threat and for attacks on population centres. The employment on the latter possess a greater risk for a country with small and densely populated areas.



Deactivation of Chemical Bombs (EOD)

CHEMICAL WARFARE CAPABILITIES

The American stocks of chemical weapon agents have been estimated at about 30,000 tons. One-third is available as filled ammunition and the rest as bulk. The stockpiles mainly consist of the nerve agents sarin and VX as well as mustard agent. Only 10

14 Krause, Joachim, ed., "Security Implications of a Global Chemical Weapons Ban", (Oxford, Westview Press, 1991), pp. 42-45.

15 Ibid. pp. 41.

per cent of the stockpile is reported to be serviceable ammunition, mainly howitzer shells. There is a small stock of sarin-filled bombs but USA does not have the capacity for long-range inputs with persistent chemical weapon agents, except for spray tanks.

In 1990, Soviet Union declared a stockpile of 40,000 tons of chemical weapon agents (today Russian territories). In October 1987, the Soviet Union opened its chemical weapons arsenal at Sikhany to invited guests from the Conference of Disarming in Geneva but most of the chemical weapon ammunition demonstrated was for older type of artillery, MLRS and bombs. In addition, chemical weapon agents warheads of the rocket FROG 7 and the SCUD B missiles were exhibited.



Aircraft Decontamination

There is relatively comprehensive information on the chemical weapon stockpile of USA and Russia. On the other hand, it is much more difficult to assess the chemical weapon capacity of the rest of the world. Therefore, the subsequent account is probably incomplete.

The chemical stockpiles, production installations and ammunition in Iraq were largely destroyed during the Second Gulf War and any remaining capacity is now being destroyed by the United Nations Special Commission. However, there is still knowledge of manufacturing processes available in the country but the import of raw material have been

made more difficult. Meanwhile Iranian authorities, during the Iran-Iraq War, announced that they planned to produce chemical ammunition of their own but there is no confirmed report on Iran's, CW capability thereafter.

Egypt had used chemical weapons since WW I even though of limited scale and probably with weapons not from indigenous production. Egypt also used chemical weapons against Yemen during the 1960's¹⁶, probably acquired from the Soviet Union/China. Egypt was assumed to have obtained its own offensive capacity and also a good protective capacity. But in recent years the suspicion had primarily been that they had been accumulating parts of the industrial infrastructures necessary to support nerve gas production program, without importing controlled precursor chemicals.

Syria¹⁷ is reported to have obtained small quantities of chemical weapon artillery ammunition before the 1973 war but it was not until the early 1980's that Syria started to build her own chemical weapon factory with the help of Western companies. Syria is considered to have chemical charges for artillery, FROG and bombs, and probably also SCUD B missiles.

Israel started chemical weapon production during the late 1960's as a result of developments in Egypt and expanded probably in connection with Syria's acquisition of chemical weapon agents during the 1980's. At the same time Israel had given both soldiers and civilians (Jews only) a comprehensive chemical weapon protection especially after the SCUD missile attacks on Tel Aviv during 'Operation Desert Storm'.

The chemical potential of Libya is probably the most difficult to assess. There are signs that Libya used chemical weapons against Chad in 1987 but it is uncertain where these weapons were manufactured. A

16 Gordon M. Burck and Charles C. Flowerree, "International Handbook on Chemical Weapons Proliferation", (USA, Greenwood Press, 1991), pp. 222-223

17 *Ibid.*, pp. 208-216

factory allegedly to produce chemical weapon agents was built at Rabta in northern Libya and was planned to start production in 1989 but later on it was 'mysteriously' destroyed by fire. Recently there were reports of a new factory established further to the south near Sabha, that had taken over production of chemical weapon agents.

France had been assumed to have chemical weapon capacity for several decades, including nerve agents produced during the 1960's. In 1986, Prime Minister Chirac stated that France intended to develop and produce new binary weapons. Subsequently, France declared that they had no chemical weapons and following the Gulf War the decision to produce new such weapons had been revoked. Today, France relies solely on nuclear capacity for retaliation.

China is generally assumed to have stockpiles of chemical weapons but there are no details available. China has strong CW defences and a vast defensive production establishment but is only a minor suspect for offensive CW capability. In particular, it is less likely a possessor compared to her neighbour, Taiwan¹⁸. However, China has several weapon systems which are capable of using chemical weapon warheads.

The chemical weapon capacity of North Korea is considered to have been developed during the 1960's when the chemical industry expanded with the help from Japan, among others. North Korea was ranked among the most likely "suspect" CW state¹⁹. During the past 20 years a few hundred tons of agents are reported to have been manufactured for artillery, FROG 7 and SCUD B missiles and for bombs. There is also a limited protective capacity and a comprehensive training programme.

Other states aligned to the Soviet union, such as Ethiopia, Afghanistan, Myanmar, Vietnam, Laos and Cuba are considered to have chemical weapon

stockpiles or have considered the use of chemical weapon agents, but this is difficult to confirm. Myanmar²⁰ and Vietnam remain on the list of state retaining chemical weapon agents in this group.

South Korea, Taiwan²¹ and South Africa have been mentioned as possessing chemical weapon stockpiles and having active research programme in this sector. In the early 1990's Pakistan was reported to have a chemical weapon research programme but does not appear to have a chemical weapon stockpile and the same applies to India.

How about the rest of the world? Only the Almighty knows ...

CONCLUSION

If nation sees no moral or ethical reason to use poisons, and they can be wielded with the kind of crude precision evident in Iraq, Afghanistan and Indochina, they offer a cheap solution to future conflicts short of nuclear holocaust. Even though there are several negotiations on the total ban on chemical weapons, several important questions remain to be solved such as how verification can be made that a decision is being respected and complied with. Despite the political climate during the 1990's appearing to favour the abolishment of chemical weapons, it is still too early for the threat they imply to be completely ignored. The destructions of the vast quantities of chemical weapons agents stored in USA and Russia will be a major problem and will require at least 10 years to complete.

Whether the future will see the unlimited use of poisons in warfare and terrorism depends on how the world chooses to deal with the challenge of these "cheap" but deadly weapons.

18 *Ibid.*, pp. 416-423.

19 *Ibid.*, pp. 396-403

20 *Ibid.*, pp. 428-429

21 *Ibid.*, pp. 433-435

Bibliography

Burck, Gordon M. and Flowerree, Charles C. and; *International Handbook on Chemical Weapons Proliferation*, London, Greenwood Press, 1991.

Fyodorov, Yuri, *Silent Death*, Moscow, Progress Publishers, 1987.

Gander, T.J., *Nuclear, Biological Chemical Warfare*, London. Ian Allan, 1987.

Hemsley, John, *The Soviet Biochemical Threat to NATO - The Neglected Issue*, London, Macmillan, 1987.

Hiro, Dilip, *Desert Shield to Desert Storm*, London, Paladin, 1992.

Krause, Joachim, ed., *Security Implications of a Global Chemical Weapons Ban*, Oxford, Westview, 1991.

Landau, Elaine, *Chemical and Biological Warfare*, New York, Lodestar, 1991.

Rose, Steven, *Chemical and Biological Warfare*, London, Harrap, 1968.

Seagrave, Sterling, *Yellow Rain*, London, Abacus, 1982.

SIPRI, *Weapons of Mass Destruction and the Environment*, London, Taylor and Francis, 1991.

Williams, Peter and Wallace, David, *Unit 731, The Japanese Army's Secret of Secret*, London, Hodder and Stroughton, 1989.



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PERFORMANCE APPRAISAL SYSTEM IN THE ARMY - AN ANALYSIS

Mej Yuvarajah s/o S. Thiagarajah

INTRODUCTION

Performance Appraisal (PA) refers to the systematic evaluation of an employee's performance on the job and usually encompasses both the job as well as trait or character qualities. Therefore, PA is regarded as a management tool for evaluating human resource productivity; and prevails in various forms such as Performance Review, Performance Assessment, Employee or Job Appraisal. In the Army, PA has been a routine administrative function performed annually and on specific occasions by way of the infamous Confidential Report or, as now known, Performance Report (PR).

Douglas Mc Gregor contends that PA is a managerial strategy to get people to direct their efforts toward organisational objectives by guiding or telling them what to do, judge how well it is done, and finally reward or punish them, accordingly. Another theorist, Dale S. Beach defines PA as a systematic evaluation of performance and potential for future development of individuals. Hence, PA is basically a process of identifying, evaluating and developing individuals in relation to work performance so as to achieve organisational goals and objectives whilst fulfilling the individual needs of employees.

Given the brief understanding, it would certainly be interesting to know 'How far does the current PA system in the Army in particular measure up, as an effective resource tool?'. Many will tend to agree that PA is arguably a difficult and sensitive undertaking, often laden with never-ending controversies and emotional attachments. The situation is even more apparent now than before with changes

under the New Remuneration System (NRS). Fortunately though, much of the ensuing sensitivities last for a short spell, towards the year end when annual reports are made out. Hence, it would seem that the best way out of any confrontational situation would be to let things 'cool-off', before matters normalise. But seriously speaking, 'Do things really blow over as harmlessly as it looks?'. Even if it does, 'Is there a price at which it occurs?'. This article attempts to address these questions by taking an overview of what PA is all about and a critical analysis at the current system, hoping to invoke some thoughts for improvement.

PERFORMANCE APPRAISAL - AN OVERVIEW

SIGNIFICANCE OF APPRAISAL

An important source of human resource information, PA forms an essential communication link between people with a common organisational goal and purpose. The magnitude of its contribution to management information system are as follows :

- * **Employees** - seek feedback on their performance as a guide to future behaviour.
- * **Superiors** - need to evaluate employee's performance in order to know what corrective or complementary actions need to be taken.
- * **Human Resource Department** - uses the information gathered in the formulation and implementation of policies. As an applied

subsystem to human resource management, PA interrelates to other activities in that, apart from evaluating how people perform, it also indicates how well the other activities have been done :

- **Auditing.** To discover the work potential, both present and future, of individuals and work teams.
- **Construction Of Succession Plans.** For manpower planning, department and corporate offices (promotion potential).
- **Discovering Training Needs.** By exposing inadequacies or strengths to be remedied or further improved by training and development.
- **Motivating.** By providing feedbacks and encouragements to enable employees to reach organizational standards and objectives.
- **Reward Management.** To distribute payroll dollars, prerequisites and promotions fairly.
- **Checking.** To validate personnel procedures, practices, selections and other human resource decisions.

Recognising that an organisation's survival hinges greatly upon employees contributions, most management today have given high priority focus towards PA. This is more so in a tight labour market where organisations face constant competitions and demands to provide the best quality of work life. In addition, findings have further supported that despite the multiplicity and indispensability of many training and educational programmes, most employee development occurs on the job. Hence, individual development would be slowed or hindered if the employee is less effectively appraised or informed concerning his or her quality of performance. In a nutshell, the PA offers a wide spectrum of immeasurable benefits i.e improving performance,

increasing motivation, identifying training and development needs, solving job and personnel problems, setting fresh goal and objectives, identifying potential career developments and the like.

PRINCIPLES

There are certain basic rules and assumptions to be considered in planning and implementing a PA system. Some of the important guiding principles to observe are :

- * The appraisal of a human resource should be directed towards the achievement of meaningful personal and organisational goals.
- * The authorisation, control and regulation of appraisal should reside in the system management to assure responsibility and credibility.
- * Measurement of personal or job performance should be part of a continuous and integrated growth process for both the employee and the organisation. It is improper to attribute every inadequacy or failure to the individual when the cause may be due to the inadequately organised structure, deprived work systems and environment.
- * The interaction of personal and job attributes may render estimations of an employee's responsibility difficult. There should be a clear linkage to the activities of other members of any workforce and to impersonal policies, structures, functions and procedures that constitute the work environment.
- * Keeping abreast of rapid change to technology and to the values and attitude of employees require regular review of the PA system. This ensures relevancy, reliability, validity and the respect of the employee, supervisor and the management.

* Appraisal strategies and the management should facilitate growth by means of a continuous bridging from one state of appraisal and development process to the next. In the design and implementation stages, it is essential to provide for effective prevention and elimination of destructive Rater's biases.

ELEMENTS OF SYSTEM

Job Performance. The core focus of a PA system is centered around job performance which is the combination of employee's skill; knowledge and experience; level of motivation; degree of application; on-the-job behaviour; and the opportunity and resources at disposal which includes supervision, job content, time constraints, facilities and training. Generally, a PA system has certain basic characteristics or elements that reflect its process, as shown at fig. 1. The basic process is to identify performance-related standards, measure those criteria, and then give feedbacks to the employee and the human resource department.

Job Expectations. Employees need to know what is expected of them on the job. This is conveyed through expectations which have to be clearly stated, mutually agreed upon and measurable. Job expectations are not mere lone statements with hidden or implied meanings but well constructed intentions expressed in the form of standards and goals.

* **Standards.** These are yardsticks or benchmarks against which performance can be correspondingly measured. Establishing standards is a vital feature as it reduces guesswork in management. Standards are derived from job analysis records and is an on-going criteria that has to be reviewed from time to time as jobs undergo changes. Standards can be described in terms of job quantity (i.e work output) or quality (i.e standard work procedures) or both.

* **Goals.** Goals are statements containing results or outcomes to be accomplished. Goals basically describe three elements i.e conditions that will exist when the desired

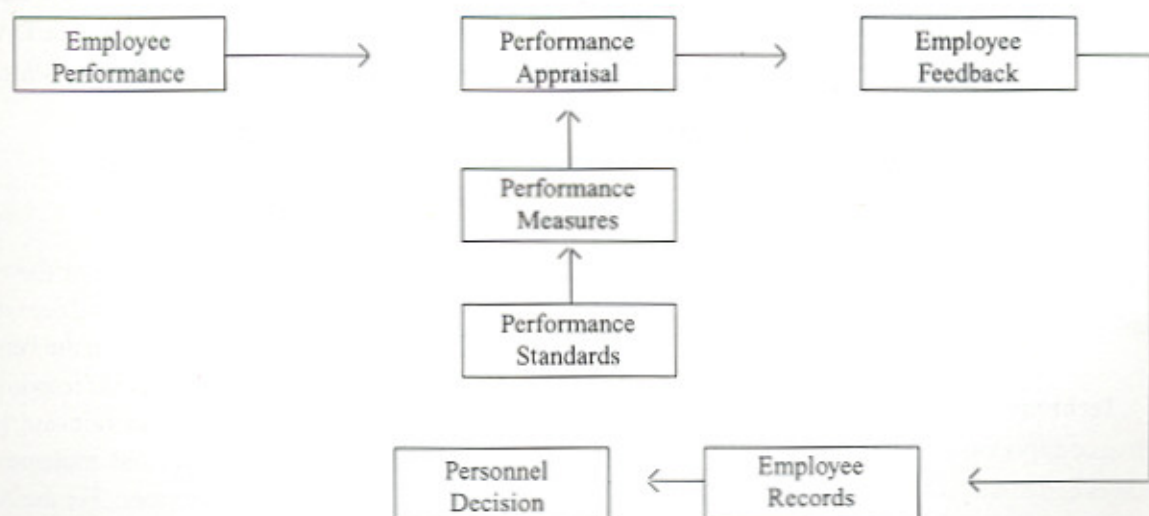


Fig. 1 - Key Elements Of An Appraisal System Performance Measures

outcome has been accomplished; the time frame for the results; and the resources the organisation is willing to provide. Goals should be challenging, attainable and should be set with the participation of the persons responsible for meeting them.

These are ratings used to measure performance (degree of performance dimensions) and should be dependable, reliable and able to report critical job behaviours that determine performance. Critical job behaviour can be determined by observation, directly or indirectly. When the Rater actually sees the performance (number of phone calls received by telephone operator), it is direct observation. However, when the Rater evaluates only substitutes or constructs (eg. through a written test to assess the proficiency of an employee's handling procedure in emergency) it is known as indirect observation. Another dimension of performance measures is whether they are objective or subjective. Objective measures are quantities and verifiable by others (eg. units produced, scrap rates, number of customer complaints etc). Subjective measures are not verifiable by others and are based on Rater's personal opinion eg. evaluation of personality traits.

Biases. A common ailment in most PA systems is the element of human error known as Rater biases. They are mostly caused when subjective measures are involved, resulting in distorted outcomes. Common forms of Rater biases are Halo Effect, Error of Central Tendency, Leniency and Strict biases, Recency Effect, Personal Prejudice, etc.

Techniques. There are various techniques of performance appraisal available and each has its distinct advantages and disadvantages. Some of the commonly adopted ones are Management by Objectives (MBO), Graphic Ratings, Critical Incident, Behaviour Anchored Rating Scale (BARS), Field Review, Checklists, Self-

Appraisal, Assessment Centres, etc. All these systems have their strengths and weaknesses. What then becomes the choice is a question of preference, exploiting the strengths and eliminating the weaknesses.

CURRENT APPRAISAL SYSTEM

HISTORICAL BACKGROUND

Based on available records on officers CR, PA was first introduced in 1950 when the Army was then under the Federation Armed Forces. After the AF Council was established in 1963, the PA system was reviewed as in the forms of BAT D 11 (Officers) and BAT D 30 (ORs). Subsequently, the officers CR underwent further evolution in 1973 and 1981. As for the ORs, the CR was reviewed once in 1975 but, for reasons unknown, never saw approval. Finally in 1992, under instruction from the Public Services Department (PSD), the PA system came under yet another review. The objective, this time, was to tailor the system to the needs of the NRS. The by-product of that exhaustive effort, undertaken by the Human Resource Division, is the current Performance Report (PR) which saw implementation in November 1993.

APPRAISAL PROCESS

Fig. 2 illustrates the flow chart of the current PA cycle, including the reporting levels and departments involved. The whole process begins with the Personnel Services Division, which has the charter responsibility of formulating the PA system and relevant policy, instructions and guidelines. The actual implementation is executed by the respective Services. For the Army it begins at the Human Resources Branch (HRB) which issues the necessary instructions and guidelines down to the units/department through the respective

Directorates, Branches and Formation Headquarters. Once an appraisal is completed the report at the units/branches is further screened and endorsed through several levels of command. Upon reaching the HRB, staffs will review the reports and, depending on its purpose, decide on the next course of action. As far as annual reports are concerned, briefs for the attention of the chief of Army or his deputy are prepared for all senior officers in the rank of Lt Col and above. Exceptions are made for junior officers in the event of an 'extreme' grading. Having served its purpose, the reports will be kept in a 'strong room' at the Personnel Services Division for safekeeping and future retrieval.

CRITICAL ANALYSIS

System's Design. It is highly commendable that the new system is a far improvement compared to its predecessor, in terms of content and structure. The PR forms have been well designed into various groups and colour coded for easy identification. By far, the single most significant change to the system that had brought it to the forefront is the linkage to monetary rewards. There has been much said, not just within the military circle, over this idea and whether it should be justifiably retained. Even though outside the scope of this article, suffice to say that all this, in no small way, actually reflects the degree of confidence and faith people have in the system. It is indeed a blessing in disguise, that

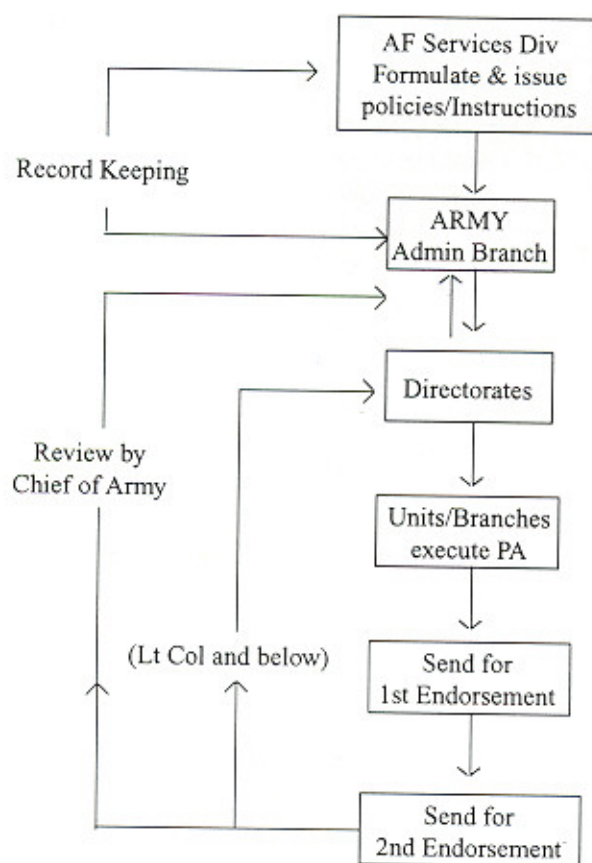


Fig. 2 - PA Process Flow Chart

this grim reality has finally been unfolded, beyond any reasonable doubt.

Notwithstanding the good effort put in reviewing and formulating a comprehensive system, there are yet still some areas that can be further improved :

* **PR Forms.** All the forms, with the exception of BAT D 30 B, has been fairly well structured in meeting the evaluative needs of soldiers. However, the same cannot be said of the BAT D 30, considering the fact that it has been so designed in purpose for salary justifications. Acknowledging the many benefits to be gained, it would be sad to see the PR reduced in significance as a mere administrative tool, as treated in the past. Given its present role, it would seem that a lot of money and effort had been channeled for an unfulfilled and trivial cause. Some of the other observations in the forms that needs review are :

- **Reference Guide.** Only the officers PR has been provided with aids to the rating scale and its definitions. Keeping the PR brief and simple may be important factors, but in this case, the point is totally missed. If at all justified, it should rightfully, be provided for the lesser privileged other ranks group, who are first timers in the field. If space is a factor it should be weighed against the likelihood of misrepresentation. Besides, there are other alternative areas where space can be saved.

- **Personal Particulars.** Some of the details sought are found repetitive and even irrelevant. Repetitions include number, rank and name; whereas information such as date of birth, race, religion, marital status, service decorations and property declarations, service courses and spouses' particulars seem irrelevant and may be even prejudicial. If the inputs are meant to update the Personnel Information System, it should resort to seek only new inputs and

those pertinent to changes in the current year.

- **Development Needs.** Unlike the officers PR, no provision has been made to solicit the developmental aspects of the other ranks. Suffice to mention that career building can be best achieved through mutual agreement between both the soldier and management. Hence, it is advisable to seek aspirations and views so that a close 'match' can be ascertained and planned. Besides, this move can save the day in the event of any future conflicts with career decisions.

- **Evaluative Tests.** Another peculiar observation is the record of shooting and physical tests that appear only in BAT D 30 A. It is not exactly known why this group has been singled out. These are tests to gauge physical and endurance strength of soldiers and constitute a basic character of military outfits. By right, the tests should be fully exploited and optimised for they represent objective tools of measuring the level of fitness and skills. Above all else, its inclusion will remove any complacency and prejudicial understanding on the need, as a soldier, to maintain the required physical and shooting standards.

- **Transparency.** One positive sign of maturity in the system is the decision to make the reports an 'open' system for the other ranks. However, it has been extended only to senior ranks and as the case with officers reports, only limited to the first level of reporting. All this, *defacto*, undermines the confidence, transparency, desire and recognition to discuss the appraisal with the Rater.

- **PA Technique.** Another key feature to the design that warrants mention

is the choice of appraisal technique which has remained unchanged. A simple to implement technique, Graphic Rating Scale is most favoured in large workforce organisations. However, the technique is also noted for its numerous disadvantages and foremost among them is its high degree for subjectivity leading to Rater biases. Whilst job performance can be subjected through objective means of measurement, the only reliable means of measuring personal traits is through the observed study and understanding of human behaviour. Therefore, the appraisal has to be entirely dependent upon the Rater's unbiased opinion and knowledge. Given this 'Achilles heel' and the depth of PA understanding, many will agree that the Behaviour Anchored Ratings Scale (BARS), would make a much better choice and preferred technique. Inserting descriptive elements of behaviour to the rating scale reinforces and improves the Rater's understanding of what to look for and thereby reduce the degree of subjectivity involved. In fact, most Armies in the world use the BARS alongside with the scores in their PA system. Interestingly enough, numerical ratings aided by evaluative statements were once used as early as 1962 and 1985. It seems ironical why these helpful aids were discarded in the first place, for it merely facilitates Rater's understanding.

- **Appraisal Criteria.** The number of trait and performance criteria used in the officers' report and that of ORs', especially the lower group varies considerably, in content and volume. Table 1 gives a general idea of the number of criteria used with two other organisations (PSD and the Australian Army). Comparatively, the officers PR record the highest score. Compared with officers' reports, there is a marked

disparity between the two OR's reports, with 13 criteria separating each group. There is also a break-away from tradition, in grouping the Corporal ranks with the Seniors. This infers that even though their status level as junior NCO remains unchanged, yet they would be evaluated on the same criteria level of the senior NCOs. This needs further study and the choice if criteria should be in consonance with the degree of responsibility and leadership traits as doctrine in the Leadership and Individual Training Manual (1983).

Gp	Mal	Aus	PSD
1	36	12	22
2	34	9	22
3	20	13	22
4	7	11	19
5	-	-	15

Table 1 - Number of Criteria

Implementation Programme. Introducing changes in the name of corporate transformation is a constant endeavour that seeks to improve an organisation's performance in terms of quality; faster, more efficient, cheaper, etc. As with all other systems, the success and the effectiveness of the PA system depends very much on the structure of its implementation programme. Here, such factors as method of approach, timing and appropriate change agents cannot be overemphasised because it is common for people affected by change to react with suspicion and scepticism. Take for example, the decision to delegate the function of PA to the lowest supervisory level. Definitely, even battle-hardened NCOs, who have no prior knowledge nor experience, will have reservations in shouldering such a responsibility. Imagine the amount of anxiety when all that has been provided is nothing more than a guide manual on how to go about filling the forms. It is also extremely naive and disastrous to expect the more 'experienced' officers

to coach and show guidance, when they themselves lack the credibility of knowledge and skills. It pays to be reminded that in the absence of a full-proof system, what remains in pursuit is confidence and acceptability in the system. And this can only be done through consensus study and most importantly the elimination of error tendencies. This is precisely the underlying crux of the matter surrounding the PA system vis a vis NRS scheme.

As everyone recalls, the principle idea for the revamp, under the NRS, was to adopt a constructive approach in appraisal i.e measurement against established and agreed objectives via Annual Work Targets (AWTs). Even though the idea was conceptually accepted it was not without reservations, due to the nature of military job functions. As a result, it has been found that response towards the AWTs has been rather lukewarm, and to put more bluntly, reduced to 'lip-service'. Perhaps, this is largely due to the fact that, unlike the civil sector where it is part of the PR, the document prevails as a loose worksheet, administered and retained by units. Any random survey at the ground level will indicate that this convenient obligation has somehow precluded the assurance of its very existence, let alone implementation. As a result, it is hardly surprising when soldiers and even managers confess to never having heard nor seen an AWT worksheet. According to one unit, AWT worksheets are only prepared for those who qualified for diagonal and vertical salary increment. This lends evidence that only 5% of the entire organisation is targeted and that they are done towards the year end.

Training. For an organisation that institutionalises training as an essential function for survival, it is sad that no training, formal or otherwise, had been catered for this key area. Surprisingly, no amount of controversies and subjectivity had prompted the need for such a call. Although it cannot be denied that some discussions and seminars have been conducted, it is not exactly the ideal forum for learning new skills. Mere provision of written policies and guides is not sufficient to make good raters out of Officers and NCOs. Time and effort must be allotted in sharpening the skills of the Rater. Given the current scenario of understanding on PA, it is too complacent to leave the responsibility to the wisdom of individuals.

This can only be done through formal training, introduced at the very grass root level, bearing in mind that informal appraisals constitute a substantial part of on-job training. If the saying 'practice makes perfect' has any truth then the early exposure should set them on firm footing in ensuring that they get it right the first-time. The idea of training is to provide the foundation knowledge on the philosophy, purpose, concept and the skills needed in conducting a good appraisal. Training should focus on the following aspects :

* **Personal Qualities.** This is an important facet because a Rater just cannot muscle his military authority to earn the credibility of making fair and accurate judgements. To be a good rater one has to exhibit leadership qualities such as knowledge, compassion and courage. Raters must be made aware of their moral obligation to the professional code of ethics. It may sound too idealistic for the likes of reality in the army, but it is virtues like autonomy, justice and altruism that distinguishes the professionals from amateurs and leaders from managers. As General Omar Bradley subscribes, 'A leader with character is one who has high ideals, who stands by them, and can be trusted absolutely'.

* **Behavioural Knowledge.** Apart from personality, a Rater must be equipped with adequate knowledge in the field of human behaviour. Although usually covered under the scope of leadership, unfortunately, much of these lectures focus upon the leader rather than the led. Once launched into their career, leaders become preoccupied with the technical trades of their job and hardly find time to learn about what makes the men tick individually. The problem is further compounded by the strong military culture against individualism.

* **Appraisals Skills.** Having laid the foundation in the Rater, the next step is to polish the appraisals skills. Here, Raters must

understand the purpose, benefits and significance and therefore learn how to maintain accuracy and consistency. Raters must be thoroughly familiar with the PR, especially the criteria and rating scale. Despite the given definition, difficulty will be encountered in identifying and tallying the performance with the appropriate factor and corresponding rating. Inconsistency in philosophy, understanding an interpretation need to be streamlined in order to reflect a fair and equitable system.

* **Rater Biases.** The greatest benefit of training is that it provides the ideal forum to openly exchange and communicate the 'sensitive' issues, which otherwise would not be discussed. Apart from the positive inputs, Raters can learn and be warned against the negative aspects such as pitfalls of human tendencies. Some of the common prejudices and biases to be learnt are :

- **Halo Effect.** This occurs when the Rater allows one aspect of a person, character or performance to influence the entire appraisal. No person is likely to be either perfectly good or perfectly bad. This is one reason why Raters feel uncomfortable in awarding the extremes ratings. It is commonly accepted that one is generally better in some areas than in others. Unfortunately, some are fond of 'writing off' a person just because he or she had failed in one area.

- **Error of Central Tendency.** This is perhaps the most rampant error in which the Rater appraises the person as average. This normally occurs when the Rater avoids 'sticking the neck out' due to doubt or in adequate information and effort.

- **Leniency and Strictness Biases.** Contrary to the central tendency, the leniency error occurs when the Rater sees

and appraises the person too favourably. The strictness is just the opposite where the Rater becomes too harsh. More often the case, these errors occur as a result of extremist believe in McGregor's theory X or Y.

- **Similar to Me Error.** In the 'similar to me' situation the Rater judges more favourably those who appear to be similar to the Rater. Here, Raters perceive themselves as the role model and make comparisons. For example, an extrovert and flamboyant Rater will have conflict in accepting an introvert and conservative soldier and therefore tends to abhor indifference and prejudice. These are more imminent where there are segregation of 'Blue-eyed Boys' and 'black sheeps'. If this goes unchecked, individuality and creativity, especially amongst the unfavourite ones will ultimately be eliminated.

- **Contrast and Position Error.** This occurs during the sequencing of rating between each Ratee. If the good performers or seniors are rated first, the averaged performers or juniors are usually rated down and vice versa. And alternative to prevent this error would be to intersperse the appraisal by order of alphabets, department or even random sequence. A similar error often committed in the Army is appraising a soldier's performance against a higher rank and position held. With a much higher expectation the tendency is to appraise 'down' the soldier for less than what he or she deserves.

Validation. One of the common issues often raised is the use of subjective criteria without mention of standards in the evaluation. Without verifiable standards of measure appraisals are relied on mere opinion, which are known to hide conscious biases and

prejudice on the part of the Rater. When elements of doubt in accuracy and consistency prevail then validation becomes a difficult task. Validation is concerned with the truthfulness of the measured results against previously set standards. Without defined standards it is difficult to make comparison with actual performance. How else can one ascertain that the ratings obtained are the true representative unless there are objective measures against production quantities, qualities, absenteeism datelines, etc. Hence, since validating the appraisal system remains a near impossible task, validating the Rater's competency becomes a better and helpful prospect. To overcome anomalies in understanding and to maintain the accuracy of rating, thoughts must be channeled on how the Rater can best be educated and trained. This leads us back to the aspect of training discussed earlier. In many organisation, PA has earned such importance to justify professional assistance, either through external or in-house programmes.

Speaking of standards, it is not something new that the Army is unaccustomed to, for it is commonly used in training under the Army Training System. Unfortunately, there are many who either do not understand or deem it unimportant, as evident in many of the so-called jobs specifications. In addition, there lacks an objective yardstick such as Skill Qualification Test (SQTs) in evaluating a soldier's level of performance or proficiency in his field or expertise. Therefore, the other alternative measure remaining is through recorded observations and findings of critical or outstanding incidents. Maintaining a checklist, as a reference material is an accepted and practical norm. However, recorded statements should not prevail in the shape of the dreadful 'black book' but described constructively both positive and negative behaviour. This action may not only be face-saving in many an unhealthy confrontation but be testimonial for further training and development of Rater.

Interview. The final important process in a PA is the interview which should be conducted in a counseling fashion, not an occasion to demonstrate who is in power. Raters have a functional and moral obligation to inform their men of their performance,

be it good or bad. If there are weaknesses, they should be made known at the earliest possible time for correction to take place, and not wait for the final interview. Being the superior entrusted to 'play god', the Rater must not abuse the interview for 'getting even', but rather treat it as performance improving dialogue. This justifies the need for Raters to be equally competent in the art of counseling as with the appraisal skills. They should learn, for example, where criticism is deemed necessary, to resort to the 'Human Sandwich' approach-criticism sandwiched between initial statements concerning a good point and exhorting improvement on another weak area. Feedbacks and counseling can be offered through many techniques i.e tell and sell, tell and listen and problem solving.

CONCLUSION

The continued growth and development of any organisation depends largely on the capability and competency of its employees. The Army is more than aware of this for they are yet to find the substitute for the human machine in battles. In the face of rapid changes and mounting challenges in the environment, the Army adopted the Total Quality Management as the catalyst to affect improvements to the systems. One of the systems that saw improvement was the PA system which had, unfortunately, in the past endured little attention. However, despite the review the system still continues to suffer the same ridicule and scepticism. Although the system has gained a value-added image, it still retains much of the subjective elements of its predecessor, thereby subjecting to charges of unreliability. Much of the debate surrounds its credibility because it involves 'subjective' elements that distort the accuracy of results with biases and skewed ratings. Apart from the shortcomings in the system's design a major area lacking is the training of Raters. Given the lessons of past experience, not to mention the traditional military approach towards man management, there is an urgent need to take an in-depth review of the system. It is time PA be seen as a management strategy to evaluate a soldier's worth (past performance) to develop (future potential) for the benefit of the organisation. No organisation is blessed with the perfect PA system, what prevails is one that

becomes 'acceptable' by its employees. Given the probability of joining the ranks of ISO 9000 in the near future, it is inevitable and wise to rethink seriously on the current design and implementation of the PA system.

References:

1. William Werther & Keith Davis, *Human Resources and Personnel Management* New York: McGrawHill, 1989 (3rd Ed).
2. Terri L. Leap & Michael D. Crino, *Personnel/Human Resource Management*, New York: Macmillan Publication Co, 1993 (2nd Ed).
3. Edwin B. Flippo, *Personnel Management* New York: McGrawHill, 1984, (6th Ed).
4. Micheal Armstrong, *A Handbook of Human Resource Management*, London: Kogan Page Ltd, 1988.
5. Wayne F. Cascio, *Managing Human Resource-Productivity, Quality of Work Life and Profits*, New York: McGrawHill, 1992, (3rd Ed)
6. Wendell L. French, *The Personnel Management Process*, Boston: Houghton Mifflin Co, 1982, (3rd Ed.).
7. A. Dale Timpe, *Performance-The Art & Science of Business Management*, New York: KEND Publications, 1988, (Series. Ed.).
8. Tan Sri Ahmad Sarji, *The Civil Service of Malaysia*, Kuala Lumpur: National Publication, 1994.
9. ATM, *Buku Panduan Mengisi Laporan Prestasi*, 1993.
10. Lloyd Mathews and Dale E. Brown, *The Challenge of Military Leadership*, Washington: Pergamon - Brassey's International Defence Publishers, 1989



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THE CHALLENGES TO UNITED NATIONS PEACEKEEPING OPERATIONS - A MALAYSIAN PERSPECTIVE

Mej Gen Mohd Shahrom bin Dato' Hj Nordin

INTRODUCTION

The United Nations Organization, or UN for short, was founded in 1945. One of its purposes was to save succeeding generations from the scourge of war. However, since then more than 150 wars have taken place, more than eighteen million people have died and several millions injured, despite more than thirty peacekeeping operations that have been conducted by the UN and a number of other international and regional bodies. Malaysia for her part has participated in over ten UN and other peacekeeping, peace-making and peace-enforcement operations. The last may be referred to as a mechanism under the auspices of collective security.

Peacekeeping operations is defined as the non-forceful use of soldiers as a catalyst for peace (usually by the separation of combatants) and as a confidence-building measure. Peacekeeping has brought the Malaysian Army substantial benefits as well as numerous challenges. But the most enduring impact on the Malaysian peacekeepers, and the international communities they have been sent to protect, has been the professionalism and humanitarianism of our soldier-peacekeepers.

Peace-making or preventive diplomacy covers a wide range of options, as described in Article 33 of the UN Charter. They include negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means. This mechanism is only applied after a dispute has escalated into armed conflict.



● PRAYING FOR SAFE JOURNEY

Peace-enforcement involves the use of armed force to bring about a cease-fire between combatants. This implies that at least one side does not want peace. One example is the NATO-IFOR operations in Bosnia, where the Malaysian Army has been deployed since December 1995. Arguably, had the UN intervened earlier, the heinous ethnic cleansing in Bosnia would not have taken such a big toll. Malaysia contributed to the UN Protection Force operations in 1993, and our contingent is still serving there within the ambit of the NATO-Stabilization Force (NATO-SFOR) operations.

In 1992 the UN Security Council, as a result of the Bosnian Serb onslaught, convened a summit to review international peace and security in the post Cold War era and proposed a new international framework for action. The mood of the meeting was almost euphoric and the UN appeared set to fulfil its potential

as the guardian of international peace and security through collective action. Nevertheless, with this mechanism the UN faces a number of challenges and pressures. Testimony to this is the current NATO-SFOR deployment in Bosnia Herzegovina.

To date, more than 17,000 troops from Malaysia have at one time or another taken part in UN peacekeeping operations. They have served in the sweltering tropical heat of the Belgian Congo (now Zaire) back in the Sixties, to the cold winter of Bosnia Herzegovina, where many of them are still deployed. The purpose of this article is to run through the Malaysian Army's experience in UN peacekeeping operations and to give a Malaysian perspective of the challenges facing such operations. Special emphasis is given on a Standby Force arrangement.

THE MALAYSIAN ARMY EXPERIENCE

ORGANIZATION NATIONS UNIES AU CONGO (ONUC) : 1960-62.

In mid-1960, the political situation in the newly independent Republic of Congo had deteriorated alarmingly, and the former colonial power, Belgium, intervened to protect the large number of Belgians remaining there. ONUC was established to assist the Congolese government to restore order and supervise the withdrawal of Belgian forces. ONUC's mandate was later expanded to include the suppression of Katangan secessionists and grew to some 20,000 strong.

Malaysia (then Malaya) contributed 3,400 officers and men to ONUC, alongside troops from some African States, to bolster UN efforts at national rehabilitation. Only one officer of the many Malaysian soldiers who went to the Congo is still 'soldiering on'. *He is none other than Gen Tan Sri Dato' Seri Ismail bin Omar, the present Chief of Defence Forces.* (He was then a platoon commander with the Second Battalion of the Royal Malay Regiment).

UN TRANSITIONAL ASSISTANCE GROUP (UNTAG) IN NAMIBIA: 1989-90.

In April 1987, the UN established UNTAG in Namibia. As its name suggests, UNTAG's mission was to assist in the country's transition to independence. Its role was to supervise the return of refugees and oversee the general election and the withdrawal of South African Forces. Malaysia's battalion task force, comprising of about 1,000 troops, was deployed to assist in these operations in the various sectors of eastern Namibia. The activities of the Malaysian contingent and other foreign and local security forces were instrumental in the successful return of thousands of refugees and the success of the general election. Two senior army officers involved in the mission were Brig Gen Hidayat Shariff and Brig Gen Ghafir bin Hamid, who are currently and respectively the Commandant of the Malaysian Armed Forces Staff College and Commander of the 6th Infantry Brigade in Sungai Petani, Kedah.

UN TRANSITIONAL AUTHORITY IN CAMBODIA (UNTAC) : 1992-93.

UNTAC was established in March 1992 under the Paris Peace Agreement's. Its mission was to supervise a cease-fire and a general election in Cambodia. The successful conclusion of the agreements themselves was strongly influenced by ASEAN and Australian diplomacy over a period of three years beginning in 1989. Sixteen thousand personnel from 32 countries took part, of which 1,800 were from the Malaysian Army. Brig Gen Dato' Mohd Arshad, now the Chief of Staff in the Army Field Command Headquarters, was among the many senior officers involved in the mission.

SECOND UN OPERATIONS IN SOMALIA (UNOSOM II) : 1993-1994.

The catastrophic situation in Somalia in late 1992 had outstripped the UN's ability to quickly restore peace and stability, mainly because the UN was hamstrung in dealing with the need to apply limited force, and by

its increasingly outmoded peacekeeping doctrine. The UN Security Council authorized a coalition force led by the United States to form a United Task Force in Somalia (UNITAF), which eventually had to hand over to a reinforced UNOSOM II. The Malaysian battalion group of about 3,000 troops served for more than a year until a successful general election was held. Gen (Rtd) Tan Sri Aboo Samah bin Aboo Bakar was nominated the UN Force Commander. Other personalities to have been involved in the UN peacekeeping operations in Somalia were Brig Gen (Rtd) Dato' Latiff bin Ahmad, Brig Gen (Rtd) Mazlan bin Muraudin and Brig Gen Rosli bin Yusof, now the Commander of the 3rd Infantry Brigade in Kuching, Sarawak.

UN PROTECTION FORCE IN BOSNIA HERZEGOVINA (UNPROFOR) : 1993-1995.

In mid-January 1992, following the outbreak of serious fighting in the former Yugoslav Federation, the UN established the UN Mission of Liaison Officers in Yugoslavia (UNMLOY), which later became the UN Protection Force, or UNPROFOR. Malaysia's involvement began when Colonel (now Major General) Md Hashim bin Mohd Hussein was appointed as the MALBATT Commander. He commanded a 972-strong contingent in the peacekeeping operations. Two subsequent MALBATTs continued the operations to restore peace and provide humanitarian assistance before the Dayton Agreement took effect. This authorized NATO to lead the Implementation Force Operations (IFOR) beginning in late December 1995. A year later the Stabilization Force or SFOR took over to ensure that stabilization processes are in order.

[Editor's note : MALBATT's area of operations (AO) was spread far and wide. It took in the Bosnian Croat municipalities of Dreznica, Jabalinica, Konjic, Pazaric and Tarcin in Central Bosnia. The advance party arrived in the Bihac pocket - MALBATT's original AO - on 1 October 1993. The last element of the main body arrived on 23 December 1993. Due to the change in its AO - it was made at short notice - and a combination of hazardous terrain and treacherous road conditions, MALBATT I, as the first contingent is now

designated, was only declared operational on 19 March 1994, when the HQ location and the logistics base at Konjic were ready for occupation.

Readers who want to know more about the purely military aspects of MALBATT I conduct of operations in Bosnia Herzegovina, and those who want to share the hopes, anxieties and reminiscences of its commander, should grab a copy of *Malaysian Tigers in Bosnia* written by Maj Gen Dato' Mohd Hashim Hussein. As a colonel he commanded the contingent for nine months.

Despite the book's shortcomings - it is riddled with grammatical and other errors, due no doubt to sloppy editing - *Malaysian Tigers in Bosnia* nonetheless makes absorbing reading.]

FROM NATO-IFOR TO NATO-SFOR : 1995 TO NOW.

Since 20 December 1995, the US has led some 60,000 troops from more than thirty NATO and non-NATO countries to supervise peace enforcement operations in Bosnia. Malaysia has contributed two contingents (MALCON), each comprising 1,533 troops



• IT'S YOUR TURN NOW. 6 January 1994, Lt Gen Cervik Bir of Turkey handing over command of the 20,000-strong UN force in Somalia to General Tan Sri Aboo Samah bin Aboo Bakar of Malaysia. Will his contribution to the UN and the country be remembered a few years from now?



● **EYES FRONT!** The Chief of Army seen here inspecting his troops prior to the departure of a MALBATT contingent to Bosnia on a UN-chartered commercial aircraft.

to support the operations. A general election was held on 14 September 1996 and Alija Izetbegovic from the Bosnian Party was appointed President of Bosnia. After the Dayton Agreement lapsed on 20 December 1992, NATO reduced its forced structure from 60,000 troops to 30,000. Malaysia followed suit in downsizing its contribution to Bosnia. The MALCON strength was reduced from 1,533 to 1,053 combatants, and continues to operate under the NATO-SFOR banner, which hopefully would cease to operate in mid-1998. To-date the Malaysian Army has contributed more than 7,600 troops, many of whom have had to face the toughest weather conditions and operate in rugged terrain.

UN OBSERVERS AND OTHER OPERATIONS

So far, more than 500 Malaysian Army officers and other ranks have been appointed as UN military observers and staff in support of humanitarian and law enforcement tasks or peacekeeping activities throughout the world. As United Nations Military Observers (MILOBs), they monitor cease-fire arrangements and, through the chain of command and the Secretary General, report to the Security Council on violations such as exchanges of fire, overflights, forward military deployment and other noteworthy incidents.

MILOBs intercede with local commanders to restore cease-fires, defuse tense situations and prevent misunderstandings. By monitoring UN buffer zones

or by periodic inspection of Areas of Limitations (AOL) of forces, their presence is a deterrent to military activity and provides a means of building confidence in the peacekeeping arrangements. They often receive complaints from the parties to the conflict and subsequently conduct enquiries. These functions, together with the provision of humanitarian assistance, for example, in the exchange of prisoners or the repatriation of those killed in action (in the case of Bosnia and Somalia), combine to assure the parties of the UN's good offices in assisting them to resolve their dispute peacefully.

In early August 1988, the UN established the UN Iran-Iraq Military Observer Group (UNIIMOG) to supervise the cease-fire between Iran and Iraq at the end of the eight-year First Gulf War. Malaysian involvement began with the dispatch of fifteen military observers led by Lt Col (now Lt Gen) Mohd Zahidi bin Hj Zainuddin on the Iranian side of the cease-fire line as Iraq had vetoed a Malaysian presence in Iraqi-held territory. Malaysian military observers served there for about a year, as opposed to the six-month duration as practised by other Western armies.

UNIIMOG service was particularly arduous due to a combination of a volatile cease-fire, climatic extremes, harsh terrain, primitive operational conditions, and the stress and deprivation engendered by staunch religious fervour.

Among the notable Malaysian Army generals who have served either as staff or observer with the UN Department of Peacekeeping Operations were Maj Gen Dato' Abdul Ghani bin Yunus, the Commandant of the Armed Forces Academy in Sungai Besi and Brig Gen Datuk Khairuddin bin Yusof, who is the Commander of the 5th Infantry Brigade based in Kota Kinabalu, Sabah. Whilst Brig Gen Dato' Mohd Azumi bin Mohamed, who is presently commanding the Rapid Deployment Brigade, served in the UN Iraq-Kuwait Observation Mission or UNIKOM, as senior intelligence officer when he was a lieutenant colonel.

STANDBY FORCE ARRANGEMENT

Since its inception more than fifty years ago, there have been many proposals for a UN permanent force. In theory a permanent force could be constituted under Article 43 of the UN Charter. Most of the problems facing UN operations are attributable directly to the current ad hoc nature of the force arrangement. The recent failures in Bosnia, Rwanda and Somalia are related to the UN's lack of responsiveness and its inaction.

Historically, collective security was first considered as part of the state system at the negotiations which led to the 1648 Peace of Westphalia. It came to prominence again in the period between the two World Wars.

Collective security calls for all states to take concerted action against any state labelled by the international community as an aggressor. This approach was adopted by the League of Nations, set up after World War 1. However, it failed when Japan attacked Manchuria in 1931 and when Italy invaded Ethiopia in 1935. The reason was that most states were reluctant to take decisive action as there was no standing army under the League of Nations' control. With the establishment of the UN, the ideal of collective security came to the fore.

The UN Security Council is empowered to take direct action against aggressors, but this requires the unanimous agreement of the five permanent members. During the Cold War, conflict among these members had made the implementation of collective security somewhat difficult. However, after the dismantling of the Berlin Wall in 1989, the world expectantly awaited a future without war. But this was not to be. There were eighty two armed conflicts between 1989 to 1993; seventy nine of these were conflicts within states whilst three conflicts in 1993 were interstate in character. The US and Russia have been reluctant to become involved in many disputes which are outside their areas of direct interest. Hence, the calls for the UN to intervene have dramatically increased.

The demand for intervention has given the UN an expanding role which has earned it the optimistic title of world policemen. But the UN is ill-equipped to take on the global-cop role. More pressingly, it is faced with growing problems. Force structure, financing and logistic support are some of the challenges confronting the existing arrangement.

CHALLENGES

As discussed earlier, the UN's conflict-resolution measures range from monitoring peace agreements to taking offensive action against intransigent states. UN operations can be categorized into four basic types. They are observer missions, first generation peacekeeping, second generation peacekeeping and enforcement. The first two are typical of operations mounted during the Cold War and generally conform to the criteria and 'principles of peacekeeping' as outlined by the UN Secretary General in his statement on Peacekeeping Operations.

In essence the principles involved are : that UN operations and its forces are deployed with the consent of all parties; that UN forces are committed to strict impartiality; that troops are provided by member states on a voluntary basis; and that forces operate under rules of engagement that stress the absolute minimum use of force to accomplish their objective.

Second generation peacekeeping differs markedly from the first generation as it frequently involves large, heavily armed troops with representation from the major powers. The recent and current UN deployments in Somalia and Bosnia are examples of second generation peacekeeping. Second generation peacekeeping forces are typically deployed in areas where there is outright war.

Most dispute in which the UN is asked to intervene have a strong element of purely internal conflict, perhaps of an ethnic, cultural or religious nature, perhaps with one or both factions aligned with



● **PROUD TO BE OF SERVICE.** A pictorial round-up of the countries in which Malaysian troops have over the years, taken part in UN peacekeeping and peace-enforcement operations. For a country with a comparatively small defence force, Malaysian soldiers have certainly done their country proud despite the Army's limited resources.

outside powers. They often have long-standing root causes overlaid by many years of retaliation and response, and claims and counterclaims. It rarely is the case that one party has right on its side, behind which the international community can unite to apply a collective security action.

The UN is not a supranational government body. It is just a mechanism or conduit through which governments agree to act together. The dominance of the United States in decisions on the Gulf crisis merely reflects its current dominance in world affairs.

One of the great experiences of peacekeeping is the exposure it brings to diverse range of foreign soldiers and civilians. This experience can be one of the great joys and frustrations of peacekeeping services.

Peacekeeping, and more so peace-enforcement, is increasingly being used as a euphemism for war and may increasingly be the initial phase of escalatory UN intervention. The former Yugoslavia will become a test case for this type of UN intervention. If such a trend does become entrenched, the Malaysian Army should integrate peacekeeping tasks into its doctrinal spectrum

of armed conflict, rather than retaining a military doctrine that refers only to traditional forms of warfare. This doctrinal transformation of peacekeeping as a form of warfare, rather than as a peacetime task, will then allow a more appropriate configuration of Malaysian Army policy and force structure designed to meet peacekeeping as a priority task.

The training requirements of peace-enforcement are closer to those of regular combat training than the training requirements of peacekeeping. Greater understanding of the complexities of conflict resolution and improved language skills will be required.

A permanent force has varied in size from a few thousand troops to a large combat formation numbering in the tens of thousands. In the NATO-IFOR led by the US in Bosnia, there was a total of 60,000 troops from 32 contributing nations; sixteen NATO and sixteen non-NATO. Malaysian troops accounted for four per cent of the total force. Undoubtedly the UN is confronted with a significant number of challenges relating to finances and logistic support. These challenges will affect the effectiveness of the UN if it were to establish a permanent standby force, and Malaysia is no exception.

The first limiting factor is finance. The high ongoing cost of maintaining a standing force would place severe constraints on its force structure size. The cost of maintaining 5,000 front line troops with up to 15,000 support personnel has been estimated at well over US\$1 billion per year. For a force of 55,000 troops the estimate is over US\$5 billion per year. Putting these figures into context, the cost of UN peacekeeping operations in 1993 was estimated at US\$3.8 billion. However, for this outlay, the UN was able to deploy up to 90,000 troops in the field. Given that UN finances will always be dependent on contributions from member states, a brigade sized force of 5,000 front line troops is about the maximum size that is financially supportable.

Considering these challenges, the Malaysian Army Forces has agreed to prepare task force to support calls by the UN for a standby force. The cost of

preparing such a force for a six-month operational period is estimated to cost RM100 million. The cost of actually deploying such a force with all the paraphernalia could be as high as RM600 million. It is hoped that this funding would be compensated by the peacekeeping reserve fund recently established by the UN.

With regard to the logistic problem, the standby force should ideally be fully prepared and be centrally located to deal with problem areas. It should have an offensive capability to enable it to meet unforeseen circumstances. Interestingly, before being considered for IFOR operations, the NATO evaluation team had to assess our logistic capabilities together with other prerequisites. The team was more than pleased to note how serious and prepared our contingent was for the mission. Subsequently NATO acknowledged the Malaysian Army's commitment and thoroughness.

CONCLUSION

In practical terms our participation in these peacekeeping operations has been an outstanding success. Malaysia deployed contingent after contingent at short notice to commence operations well ahead of anyone's expectations. In the case of Bosnia, for example, our soldiers are doing a splendid job in an isolated and remote area and are gaining valuable combat and other experience. The work is not *that* exciting, nor is it unduly dangerous. But it can be gruelling and at times monotonous. Nevertheless our soldiers are making an important contribution to peace in an unstable nation-state and are exposed to a diverse range of professional experience.

At the military level the Malaysian Army has shown by its participation in the various deployments - Namibia, Cambodia, Somalia and Bosnia - that we are able to handle even the trickiest situations and do everything that is expected of us. In the NATO-IFOR operations, we have also shown that we can participate in such undertakings outside the scope of the UN ambit.

At the strategic level, Malaysia's strong support for a multinational peacekeeping force has been an excellent means of contributing to world peace in a practical and achievable manner.

At the tactical level, multinational peacekeeping has provided the Malaysian Army with valuable operational experience and, just as important, the professionalism displayed has benefitted the victims of the conflicts concerned, from practical as well as humanitarian stand point.

The Malaysian Army's record of four UN and one multinational peacekeeping/peace-enforcement operations is one of which Malaysians can be justifiably proud. While Malaysia's geostrategic circumstance has meant that the force level of many of our contributions has often been nowhere near as large as that of some other UN members, her track record in this field is a long one, and the quality, bravery and commitment of our soldiers are unmatched by those from regional countries and are almost equal to those from developed countries. However, the Army's force structure cannot be based on the peacekeeping determinant alone.

Nevertheless, Malaysia can be especially proud of contributing sizeable contingents to the more

difficult and more dangerous operations in Congo, Namibia, Somalia, Cambodia and Bosnia Herzegovina and for doing her part in other UN military operations elsewhere. As the Malaysian Army prepares for a continuous MALCON operation in Bosnia under the NATO banner, the proud tradition prevails. A tradition underscored by the motto embossed on every UN campaign medal : *In the Service of Peace*.



● WISH YOU WERE HERE! Wearing the familiar blue helmets of the UN peacekeeping troops everywhere, these Malaysian soldiers look happy enough amid the snows of Bosnia. But don't let their smiles deceive you. They can be as fierce as a caged tiger if and when the occasion demands.

PUSAT SAINS DAN TEKNOLOGI PERTAHANAN

BAHAGIAN 2 - KEPAKARAN DAN PERALATAN

oleh :

Dr Abdul Ghaffar bin Ramli dan
Mej Norazman bin Mohamad Nor



MISI

Membina, memaju dan membekalkan
keupayaan serta kepakaran saintifik dan
teknologi yang berkesan bagi menyokong
Kementerian Pertahanan ke arah menjadikan
Angkatan Tentera Malaysia satu angkatan tentera
yang moden dan cemerlang.



AM

Pusat Sains dan Teknologi Pertahanan (PSTP) mempunyai peranan dan fungsi yang khusus dalam kerja-kerja penyelidikan. Oleh itu penyelidik PSTP dipilih dari pelbagai bidang kepakaran manakala makmal-makmalnya pula dilengkapi dengan pelbagai peralatan untuk membantu penyelidik menjalankan ujian, analisa dan penyelidikan.

KEPAKARAN PENYELIDIK PSTP

Umumnya kepakaran Pegawai Penyelidik PSTP bersesuaian mengikut bidang tugas dan aktivitiya kecuali beberapa kekurangan untuk menangani teknologi ketenteraan terkini. Jadual 1 menunjukkan profil kelayakan pegawai penyelidik mengikut kelayakan dan bidang kepakaran.

Bil	Kelayakan	Bidang Kepakaran	Catatan
(a)	(b)	(c)	(d)
1.	Fizik	Fizik Gunaan, Optik, Balistik, Akustik, Ujian Tanpa Musnah, Piawaian Elektronik dan Mekanikal, Getaran dan Bunyi	
2.	Kimia	Petroleum, Minyak & Pelincir, Teknikal, Kimia Analitik, Pencemaran Persekitaran, Polimer, Propelan, Piroteknik dan Ledakan.	
3.	Kejuruteraan Mekanikal	Jentera, Metalurgi, Persenjataan, Kenderaan, Rekabentuk dan Kakisan.	
4.	Matematik & Penyelidikan Operasi	Penyelidikan Operasi dan Penyelakuan.	
5.	Kejuruteraan Elektronik & Elektrikal	Elektronik Komunikasi, Kuasa dan Pengantaramukaan.	
6.	Sains Biologi	Teknologi Makanan, Mikrobiologi dan Pemakanan.	
7.	Sains Komputer	Penyelakuan dan Pengaturcaraan.	

Jadual 1 : Kelayakan dan Kepakaran Pegawai Penyelidik PSTP

KEUPAYAAN TEKNIKAL PSTP

PSTP mengendalikan tiga makmal yang berasingan iaitu Makmal Utama PSTP, Kompleks Persenjataan PSTP dan Makmal Maritim PSTP. Setiap makmal dilengkapi pelbagai peralatan mengikut bidang kepakaran dan aktiviti yang dijalankan di lokasi

berkenaan. Jenis aktiviti dan keupayaan yang wujud di makmal-makmal PSTP disenaraikan di bawah.

* Makmal Utama.

- Di makmal utama, bidang dan keupayaan utama PSTP adalah berikut:

Bil	Bidang	Keupayaan Utama
(a)	(b)	(c)
1.	Sains Biologi : Sains Makanan dan Mikrobiologi	a. Ujian khasiat makanan. b. Ujian fizikal bahan makanan. c. Ujian Mikrobiologi. d. Ujian ke atas bahan pembungkus makanan.
2.	Tekstil dan Pakaian	a. Ujian kualiti tekstil. b. Ujian kekuatan bahan getah. c. Ujian kualiti bahan kulit. d. Pengukuran warna.
3	Kejuruteraan Elektrikal, Elektronik dan Optik.	a. Penjanaan isyarat. b. Pengiraan frekuensi. c. Pengukuran kuasa. d. Pengukuran suhu. e. Ujian komunikasi radio. f. Rekabentuk dan ujikaji elektronik. g. Penggunaan Penganalisis spektrum, Osiloskop, Titi Semesta ('Universal bridge') dan Pembekal kuasa meter pelbagai.
4.	Sains Bahan dan Metalurgi.	a. Ujian Metalografi mikroskop dan makroskop untuk mengenalpasti bahan logam, ciri-ciri dan analisis kegagalan. b. Rawatan haba ('Heat Treatment'). c. Ujian tanpa musnah menggunakan magnet pengesan retak dan tusuk pencelup ('dye penetrant'). d. Pengukuran Kakisan.
5.	Penyelidikan Operasi.	a. Sistem Olah Perang Berkomputer b. Sistem Logistik dan Kawalan Inventori. c. Kajian operasi dan pertahanan. d. Penilaian dan analisis statistik. e. Analisis keputusan.

(a)	(b)	(c)
6.	Kejuruteraan Jentera dan Kenderaan.	a. Ujian am penentuan spesifikasi dan kualiti. b. Ujian kuasa. c. Ujian bunyi dan getaran.
7.	Bantuan Kejuruteraan.	a. Ujian tegangan dan mampatan sehingga 400 KN. b. Ujian kekerasan ('hardness') logam. c. Ujian hentaman sehingga 300J kuasa. d. Ujian cat.
8.	Ujian Persekitaran.	a. Pengukuran suhu, kelembapan, tekanan dan lain-lain. b. Simulasi ujian lasak dan ketahanan menggunakan mesin hentakan dan gegaran ('bump, shock and vibration machines'). c. Pengukuran dan Analisis akustik.
9.	Sains Kimia.	a. Analisis polimer dan penyalut dengan pengkhususan kepada tekstil dan pakaian. b. Analisis gas dan cecair oksigen. c. Analisis kuantitatif bahan logam. d. Analisis dan ujian produk petroleum. e. Analisis kimia am menggunakan kaedah spektroskop, kromatografi gas dan juga kaedah klasikal.
10.	Fizik Gunaan.	a. Ujian tanpa musnah menggunakan alatuji ultra-bunyi, magnet, teknik arus 'eddy', analisis haba, radiografi, Sinar-X dan Gamma. b. Pengukuran ketumpatan kuasa menggunakan "Power Density Meter". c. Penggunaan teknologi Laser. d. Penggunaan teknologi Infra-merah.
11.	Teknologi Maklumat dan Sains Komputer.	a. Penyelakuan. b. Pengaturcaraan.

Jadual 2 : Keupayaan dan Bidang di Makmal Utama

- **Spesifikasi, Piawaian dan Penentukuran ('Calibration')**. PSTP mampu untuk mengekalkan piawaian fizikal peralatan ATM dengan menentukan tahap ketepatan sesuatu

peralatan ataupun perkakasan termasuk pelarasan sistem persenjataan supaya sentiasa tepat mengikut spesifikasi. Khidmat piawaian dan penentukuran terbahagi kepada tiga bahagian iaitu:

Bil	Bidang	Keupayaan Utama
(a)	(b)	(c)
1.	Metrologi Mekanikal	a. Pengekalan piawaian fizikal untuk panjang, jisim, daya dan tekanan. b. Memberi khidmat pengukuran tepat dan penentuan kepada ATM dan Industri pertahanan tempatan.
2.	Metrologi Elektrikal	a. Rujukan asas pengukuran kuantiti elektrik seperti voltan, arus rintangan, kemuatan ('capacitance') dan kearuhan ('inductance'). b. Piawaian frekuensi - Alur Saesium ('Cesium Beam') Pengayun Hablur Kuarza ('Quartz Crystal Oscillator') dan penerimaan VLP/LF. c. Peralatan kegunaan am dan penentuan - Penjana isyarat, Penggira frekuensi, Meter kuasa, Osiloskop, Titi semesta, Pembekal kuasa meter pelbagai dan Meter upaya ('potentiometers')
3.	Pemeteran Suhu ('Thermometry')	a. Piawaian suhu antara 0 °C sehingga 2700 °C. b. Pengukuran tepat suhu menggunakan meter suhu, pengganding suhu ('thermocouples') dan pirometer optik. c. Penentuan relau ('Calibration of furnaces').

Jadual 3 : Khidmat Piawaian dan Penentuan PSTP

*** Kompleks Persenjataan.**

- Lapangasar Tertutup 600 meter ujian kelayakan peluru sehingga kaliber 57mm.

- Telaga serpihan untuk ujian grenad.

- Menara Kejatuhan untuk ujian ketahanan bekas peluru.

- Makmal Penyelidikan dan Jaminan Kualiti:

- ◆ Ujiniilai peluru menggunakan

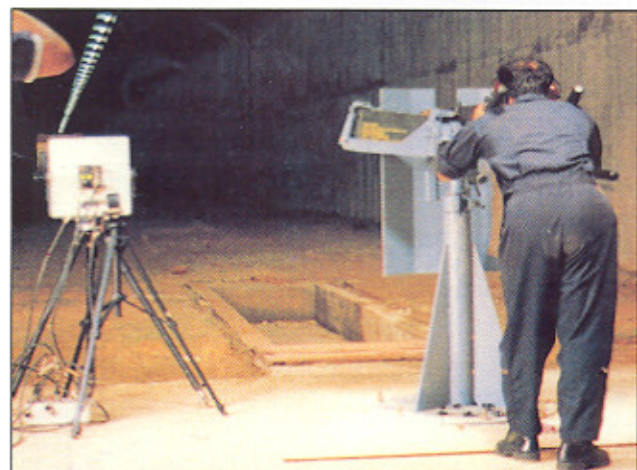
instrumentasi 'Pulsed-Doppler' dan sistem sasaran optik.

- ◆ Ujian senjata kecil.

- ◆ Ujian bahan letupan dan piroteknik.

- ◆ Ujian Bunyi dan Getaran Mesinari.

- ◆ Penyelidikan propelan untuk menghasilkan teknologi roket.

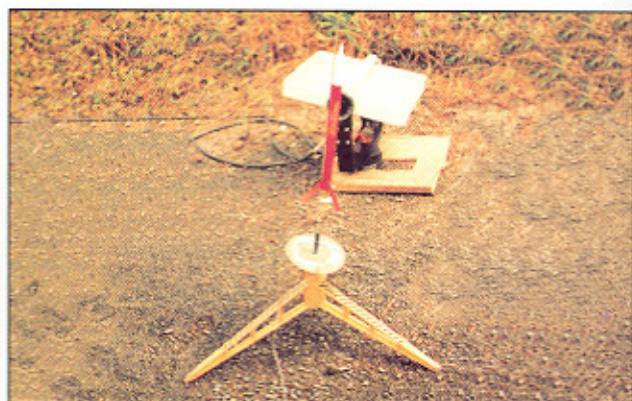


Ujian tembakan dengan peralatan pengukuran balistik

* **Makmal Maritim.**

- Penganalisisan PMP menggunakan peralatan spektrometri serapan automatik dan pengukuran kelikatan.
- Ujian Bahan menggunakan mesin tarikan-tegasan, penguji kekerasan dan meter spektrum pancaran bunga api ('spark-emission spectrometer').
- Ujian Tanpa Musnah menggunakan kelengkapan mesin sinar-X.
- Penyelidikan dan pembangunan sistem fluoroskopi untuk membantu aktiviti ujian tanpa musnah melalui teknik rakaman arca yang tidak berasaskan filem.

Pada masa ini keadaan makmal serta beberapa peralatan yang ada agak usang dan memerlukan pembaharuan. Untuk mengekalkan sokongan teknikal kepada ATM, keperluan semasa ditampung melalui penggunaan perkhidmatan berbayar dari agensi-agensi luar.



Kajian pembangunan teknologi propelan bagi roket dan misil.

Lazimnya penglibatan PSTP dalam tugas penilaian, pengujian dan penyiasatan untuk ATM merangkumi perkara-perkara berikut (disusun mengikut kepakaran):

- * Petroleum, Minyak dan Pelincir (PMP).
- * Tekstil dan Pakaian.
- * Bahan dan Logam.
- * Peralatan Elektrik dan Elektronik.
- * Peralatan Mekanikal.
- * Senjata dan Peluru.
- * Kenderaan Darat.
- * Kenderaan Laut dan Pelantar.
- * Makanan.
- * Kenderaan Udara.
- * Peralatan Optik.
- * Penyiasatan Kemalangan.
- * Bahan-bahan lain seperti penggilap kasut, botol air, sabun pencuci, peti kayu, ketuhar dan lain-lain.

WAWASAN MASA DEPAN PSTP

Selaras dengan perkembangan pesat teknologi pertahanan serta dasar kerajaan untuk memodenkan ATM, PSTP harus menjalani perubahan drastik untuk meningkatkan kewibawaan dan mampu untuk terus membekalkan sokongan teknikal dan kepakaran secara menyeluruh kepada ATM. Perkembangan sains dan teknologi di negara ini dengan penekanan diberikan kepada bidang Penyelidikan dan Pembangunan bagi merealisasikan Wawasan 2020 perlu diterapkan sebagai budaya dan amalan PSTP untuk bersaing dengan institusi lain dalam perkembangan teknologi di negara ini, khususnya teknologi ketenteraan.

PENUTUP

Selama 27 tahun wujudnya PSTP di KEMENTAH, berbagai-bagai perkhidmatan teknikal yang khusus dan menyeluruh telah diberikan kepada ATM. Keperluan ATM dalam setiap bidang seperti makanan, pakaian, kenderaan, pesawat, elektronik, PMP, bahan, jentera, operasi dan lain-lain telah mendapat sokongan teknikal dari PSTP. PSTP juga telah menceburi bidang penyelidikan dan pembangunan dan memberi galakan dan sokongan kepada setiap cawangan perkhidmatan ATM untuk melibatkan diri di dalam Penyelidikan dan Pembangunan sebagai usaha membangunkan teknologi ketenteraan di negara ini. PSTP juga sentiasa bersikap terbuka dan akan terus memberi sokongan dari segi sains dan teknologi kepada mana-mana cawangan perkhidmatan yang memerlukan perkhidmatan dan kepakarannya.



Dr Abdul Ghaffar bin Ramli kini menjawat jawatan Pengarah Pusat Sains & Teknologi Pertahanan. Beliau telah berkhidmat sebagai pegawai penyelidik selama 16 tahun. Sebelum ini beliau bertugas sebagai Pengarah Penyelidikan Unit Tenaga Nuklear (PUSPATI) selama 2 tahun. Beliau berkelulusan Doktor Falsafah di dalam bidang Fizik dari University of Birmingham, UK.



Mej Norazman bin Mohamad Nor telah ditauliahkan ke dalam Kor Jurutera Diraja pada 1 Nov 86 setelah memperolehi Ijazah Sarjana Muda Sains Kejuruteraan Awam dan Matematik dari USA. Beliau kemudiannya melanjutkan pelajarannya ke USM melalui Skim Pengajian Tinggi ATM dan memperolehi Ijazah Sarjana Sains Penyelidikan Operasi pada tahun 1995. Beliau kini bertugas sebagai PS 2 Penyelidikan di PSTP.

MEDICAL INTELLIGENCE... PERSPECTIVES AND REFLECTIONS

Mej (Dr) Faizal bin Hj Baharuddin

"If always appear prepared, it is because entering on an undertaking, I have meditated for long and foreseen what may occur".

- Napoleon Bonaparte, 1831

INTRODUCTION

Those were the exact words uttered by one of the greatest army generals of all time, Napoleon Bonaparte before going into the Battle of Waterloo. Let us not ponder on the outcome of the battle itself but rather the essence of his words. It shows that battlefield intelligence has come a long way and it will remain a very decisive factor in winning or losing a battle.

The Malaysian Government has been instrumental in playing a very active role in the United Nations Security Council peace-keeping missions in various countries in our region and the world on a whole. With the election of a Malaysian as the President of the United Nations General Assembly (UNGA), our distinguished nation would therefore play an even larger role in providing assistance to this body. Therefore it is pertinent that our troops are equipped with sound knowledge on Medical Intelligence.

The history of warfare shows the effect that disease or non battle injuries have had on fighting forces. More casualties have been caused by disease organisms, temperature extremes and general injuries than have been caused by direct enemy actions. This matter would have to be addressed if fighting forces were 600,000 soldiers in his quest to invade Russia and suffered losses up to 1/2 million men, and 80 per cent were due to diseases and non battle injuries (epidemic typhus, diphtheria, dysentery, cold injury and exhaustion).

With the disunification of the Soviet Republic (USSR), the Commonwealth of Independent States (CIS) no longer has any control over nuclear warheads and indefinitely that dispersion of nuclear, chemical and biological weapons would be a cause of concern to the deployment of the Malaysian troops to anywhere in the world. Several nations and individuals have also been observed in recklessly peddling equipment and bomb building skills and expertise. Medical Intelligence would therefore serve the purpose of preparing our troops and logisticians to incorporate protection against this form of warfare where if deployed, the results of which would be devastating.

It is suffice to say that before embarking into the 21st century it is definitely worthwhile for the Intelligence Corps to look into in collaboration with the Medical Corps to develop Medical Intelligence to improve the combat effectiveness of our soldiers locally and in the international scene.

MEDICAL INTELLIGENCE AND MEDICAL THREAT

Good intelligence is critical to any military activity and is equally important at both the operational and tactical level. Commanders should therefore be attuned to the values of timely intelligence and use it to their advantage. Intelligence Preparation of the Battlefield (IPB) as it is known by many is a process whereby threat and environmental factors are analyzed to aid commanders in making decisive military decisions to maximise combat power on the battlefields in search of victory.

MEDICAL INTELLIGENCE

Medical Intelligence is a category of intelligence resulting in the collection, evaluation, analysis and interpretation of foreign medical, biotechnical and environmental information. It is highly technical and very critical to strategic and tactical planning and operations to conserve the fighting strength.

Medical Intelligence also includes the observation of the fighting strength of enemy forces and the formation of assessments of foreign medical capabilities in both military and civilian sectors.

MEDICAL THREAT

The term medical threat is basically the entire composite of all ongoing or potential enemy actions and environmental conditions that would reduce the combat effectiveness of the soldier on the battlefield. Commanders and health service support planners must continually update their medical threat analysis as new information comes to their attention to ensure the mission or tactical courses of action and supporting plans taken would place the forces at an advantage.

Historically more soldier have been rendered noneffective from Disease Non Battle Injury (DNBI) than from injury received as a direct result of conflict.

There are many general categories of potential information of the medical intelligence and analysis of medical threat. These include:

- * Area of operation.
- * Diseases in the area of operations.
- * Animal and plant hazards in the area of operations.
- * Sanitation, food and water supplies in the area of operations.
- * Enemy weapon systems in the area of operations.
- * Enemy rear operations capabilities.
- * Enemy health and fitness.
- * Enemy health service support capabilities, facilities and systems.
- * Enemy medical material.

There are various factors which influence the area of operations. These would include the environment, weather and terrain. It is very essential for planners to these factors into account. Tactical operations would vary in different theatres of operations i.e. manoeuvre forces will be constantly changing direction and tactics, moving from attack to defence and back in order to seize and exploit opportunities. Whether in the heat or cold, these situations would indefinitely take their toll on the fighting forces and therefore require special considerations. Few lessons have been learned during recent years in relation to the environment on the whole.

In 1967 during the Six-Day War, the Israelis were better prepared in facing the heat and used it against the Egyptian forces which suffered 20,000 heat-related deaths as compared to 128 heat related injuries. The commanders of the Israelis forces achieved this by instituting a mandatory water consumption policy at all levels.

The British also had their fair share of embarrassment. This happened during the Falklands war and it was due to the extreme cold. As a result of poor logistical planning, no provisions were made to reduce the effect of the weather.

Having the knowledge of the local endemic or epidemic diseases helps in preparing the force prior to deployment. Preventive measures could be taken in educating and training soldiers to overcome this shortfall. The list would be too long if all diseases were to be listed. Some diseases which have created havoc and chaos are malaria, yellow fever, dengue fever, sandfly fever, encephalitis, plague, endemic typhus and lyme disease.

The impact on the fighting forces would just be too great if this was not taken into consideration. Animals and plants also pose as a hazard to soldiers. Information on habitats would provide a very useful guideline to help decrease the number of non battle injuries.

There are no guarantees that there will be safe food or water supply in any area of deployment. It is

therefore important to identify the above subject matter in an area of operations. Diarrhoeal disease is usually the main culprit when breakdown in basic sanitation occurs. Commanders should ensure food quality assurance, proper field sanitation and water sources purification.

Future weapon system are becoming more complex may come to common knowledge that these weapons are using lethality munitions to better influence the battle. Conventional weapons and advances technological developments in weaponry i.e. blast enhanced weapons, flame and incendiary weapons, directed energy weapons and lasers, nuclear and chemical weapons and genetically engineered biochemical compounds would cause a shift in the spectre of casualties seen. Medical capabilities would be tested severely and this would have profound effect on the outcome of war.

The spectre of nuclear, biological and chemical warfare will continue to shadow the battlefield. Even the threat to deploy these weapons would cost unnecessary psychological effect on the area of operations and magnify the destructive character of operations. At strategic and operational levels employment of this warfare would lead to a change in tempo and direction of the battle and major personnel, equipment and material losses.

It is also vital to understand how the enemy structures its medical assests i.e. health service supports

capabilities, facilities and systems on the battlefield.

CONCLUSION

Sustaining the health of fighting force is a critical factor in the success and failure of the Armed Forces. Medical intelligence plays a very important role in providing necessary information which is vital in developing and maintaining combat power.

Knowledge, involvement and emphasis on medical intelligence at all levels of command are required to ensure critical medical resources are managed properly to optimize return to duty rate and to conserve the human component of the combat commanders weapon systems.

REFERENCES:

1. Department of the Army. *The Modern Battlefield. In : Medical Intelligence, FM 8-55, Washington D.C. 1985.*
2. Department of the Army. *Health Service Logistics. In : Medical Intelligence, FM 8-55, Washington D.C. 1985.*
3. Department of the Army. *Medical Support in The Modern Battlefield. In : Medical Intelligence, FM 8-55, Washington D.C. 1985.*



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KRITIKAN BUKU :

THE UNITED NATIONS AND CRISIS MANAGEMENT: SIX STUDIES

Ditulis Oleh

Coral Bell (Ed)

OLEH :

LT KOL NAHARUDDIN BIN SHAARI

PENGENALAN

Buku ini hasil gabungan lima orang penulis dan setiap daripada mereka telah menyumbangkan satu artikel yang dijadikan sebagai bab masing-masing. Coral Bell sebagai penyunting telah menyumbangkan kepada Bab Pengenalan dan Bab 2 yang bertajuk *"The Fall and Rise of the United Nations"*.

Buku ini diterbitkan oleh *"Strategic and Defence Studies Centre"*, Universiti Kebangsaan Australia. Ini memberikan gambaran ia mungkin merupakan jurucakap kerajaan Australia dan mendokong cita-cita dan dasarnya. Andaian ini diperkuatkan dengan beberapa penulis utamanya begitu gemar mengaitkan hujah-hujah mereka dengan pendapat atau pandangan wakil kerajaan Australia (pendapat atau penulisan Gareth Evan selalu dipetik). Sebagai contoh Gary Klintonworth di dalam Bab 3 yang menulis tajuk *"The United Nation's Power to Intervene in the Domestic Sphere : The Charter and Politics"*, ketika menguatkan hujahnya "mengenai campurtangan antarabangsa berkaitan dengan hal ehwal domestik",

telah memetik pandangan Gareth Evan mengenainya¹. Selain dari itu Norman MacQueen dalam artikel Bab 5 bertajuk *"UN Peacekeeping in the Cold War Decades and Transition Period, 1956 - 1989"*, telah juga memetik ucapan Evan mengenai pentingnya *"UN Peacekeeping Force"* yang dikuatkan dengan menonjolkan Kertas Putih kerajaan Australia². Seterusnya Shirley Lithgow juga tidak ketinggalan bersama-sama membantu kerajaan Australia dalam peranan mereka mengenai keselamatan dunia yang ada kaitan dengan kepentingan negara dan geopolitik Australia. Shirley telah memetik penulis Gareth Evan di dalam artikelnya Bab 6 yang bertajuk *"Cambodia : An Early Retrospect"*. Malah untuk memberi penekanan kepada hujah-hujahnya, Shirley telah memetik penulisan Evans, *"Failure to resolve the Cambodian conflict, therefore, held the potential for increasing regional instability, particularly in the*

1. Hujah ini telah diperkuatkan dengan merujuk kepada nota kaki no. 16 hal. 31 kepada atikel tersebut didalam buku Coral Bell, Ed, *The United Nations and Crisis Management : Six Studies*, ANU Printing SVC., Canberra, 1994, hal. 31.

2. MacQueen cuba menghujahkan mengenai peranan PBB di dalam menangani masalah keselamatan dunia dan ia kaitkan pandangan dan dasar kerajaan Australia, maklumat lanjut sila rujuk kepada *Ibid.*, nota kaki no 26, hal 81.

context of superpower confrontation, regional polarisation and even a regional arms races"³.

Oleh yang demikian apabila membaca buku ini kita perlulah berhati-hati apa yang tersirat di sebalik tema-tema yang cuba menonjolkan pengurusan konflik oleh Pertubuhan Bangsa-Bangsa Bersatu (PBB). Oleh kerana buku ini diolah dengan gabungan beberapa orang penulis, maka sebarang ulasan dan kritikan terhadapnya perlulah ditumpukan kepada setiap bab atau individu supaya dapat mengenal pasti kekuatan dan kelemahannya.

Jika seseorang itu berminat atau serius terhadap PBB atau krisis-krisis yang tercetus masa kini, buku ini boleh menjadi salah satu rujukan yang dapat memberi gambaran kepada si pembaca. Namun buku ini agak sukar dijaja sebagai buku yang boleh dijadikan rujukan yang berbentuk global. Maksud di sini, besar kemungkinan buku ini tidak diterima oleh sesetengah negara malah di Barat sekalipun.

BAB 1 : "INTRODUCTION : THE NATURE OF CONTEMPORARY CRISES"

Bab ini ditulis sendiri oleh penyuntingnya iaitu Coral Bell. Tema buku ini memberi penekanan bahawa implikasi krisis di dunia ini akan berterusan seperti ketika Perang Dingin dan sebelumnya. Ini diperkuatkan dengan masalah-masalah di dunia ini akan tertumpu kepada masalah dalaman sesebuah negara berbanding dengan masa dahulu yang tertumpu kepada krisis antara negara. Masalah suku kaum, misalnya lebih menonjol daripada masalah antarabangsa yang memberi penekanan kepada liberalisasi. Sebenarnya penekanan ini adalah matlamat asal penubuhan PBB⁴. Berlanjutan dari itu Coral Bell cuba menyarankan supaya masyarakat antarabangsa mencari jalan *"how to cope with conflicts..."*

Dalam perenggan-perenggan awalnya Coral cuba membayangkan bahawa krisis-krisis di dunia nampaknya masih berterusan sedangkan PBB tidak nampak boleh menjadi penyumbang yang penting untuk menyelesaikan masalah-masalah tersebut. Oleh itu PBB perlu dirombak supaya boleh berperanan dengan lebih berkesan lagi. Beliau memetik ucapan Presiden Clinton dan Gareth Evans untuk memberi satu kekuatan kepada pengesyorannya. Namun demikian beliau juga telah memberi satu faktor yang menyulitkan keadaan pengurusan konflik dunia, iaitu masalah negara-negara yang menjadi ahli kepada PBB itu sendiri. Katanya PBB menekankan kepada demokrasi dalam menangani masalah dunia dan setiap resolusi yang melalui Perhimpunan Agung memerlukan persetujuan majoriti.

Apa yang menarik ialah hak mengundi sama rata, sama ada negara itu kecil dan lemah atau negara itu kuat dan berpengaruh. Namun kebanyakan negara terutama negara membangun yang melaungkan hak memilih dan demokrasi di PBB tidak mempraktikkan sistem yang sama di negara masing-masing⁵. Maka itu dapat dirumuskan Coral Bell membuat ukuran sistem politik dunia menurut kaca mata barat sehinggakan terlalu condong ke arah tersebut. Padanya apa yang berasal dari Barat baik dan betul semua. Beliau taksub bahawa keamanan akan wujud sekiranya meniru nilai-nilai Barat. Oleh itu jika membaca buku ini perlu berhati-hati dan mempunyai pemikiran yang kritikal sebelum terjebak dalam pengamatan *"Westerncentric"*.

Hujah ini perlu diberi perhatian bukan kerana Barat itu tidak memberi kebaikan kepada dunia, tetapi apa yang dipertikaikan setiap kali membaca buku-buku yang ditulis oleh orang-orang Barat sentiasa sahaja memberi penekanan kepada keberkesanan Barat sahaja (walaupun keberkesanannya masih boleh dipertikaikan). Kenapa kita tidak boleh melihat *"from the other side of the coin"*? Maksudnya ialah; apabila Barat melihat demokrasi, mereka akan menumpukan kepada hak asasi manusia, kebebasan mutlak, dan kebebasan bersuara. Mereka tidak langsung berfikir *'variables'* yang terdapat di dalam krisis sesebuah

3. Petikan ini telah diambil oleh Shirley di dalam penulisan Evans bertajuk *"Australia's Foreign Relations"* yang dijadikan sebagai nota kaki no 1 di dalam *Ibid.*, hal 86.

4. *Ibid.*, hal 7.

5. *Ibid.*, hal 2.

negara itu. Sebagai contoh kenapa tidak difikirkan latar belakang, tahap ekonomi, pelajaran, nilai, tradisi dan budaya sesebuah negara yang bermasalah itu? Terdapat negara-negara apabila mengamalkan demokrasi mutlak, ia akan mengancam kestabilannya⁶. Oleh itu sudah tentulah negara berkenaan tidak sesuai menganuti sistem demokrasi mutlak. Mungkin mereka boleh menuju kepada sistem tersebut, tetapi terpaksa mengikut teori "incrementalism"⁷ dengan menumpukan kepada peningkatan ekonomi, sosial dan pelajaran berdekatan-dikit sebelum boleh mengenengahkan demokrasi mutlak. Di sinilah sesuatu konsensus perlu diambilkita. Sementara pihak kita (negara-negara ketiga) mahu memahami sistem Barat, mereka juga (iaitu Barat) perlu sedar aspirasi kita. Ini kerana tidak ada negara di dunia ini suka kepada krisis. Tetapi keadaan yang memaksa mereka menjadi sebegitu.

Di halaman 4 Coral Bell telah membincangkan sistem persekutuan atau "federalism". Beliau berkata bahawa apabila Empayar British menurun kekuatannya, kerajaan British percaya sistem persekutuan adalah yang terbaik apabila memberikan negara-negara yang dijajahnya kemerdekaan. Namun sistem itu sendiri telah memusnahkan negara-negara yang telah diberi kemerdekaan itu. Beliau telah memberi contoh Caribbean dan Malaysia. Hujah ini amat menarik sekali. Pertama dekad-dekad yang lepas negara Malaysia jarang atau tidak pernah dijadikan bahan hujahan sesuatu pendekatan, konsep atau pun teori politik antarabangsa. Kedua, kenapa pula apabila membincangkan kemusnahan persekutuan, mengapa Malaysia dijadikan contoh, kerana kita tahu krisis memang ada berlaku di negara ini tetapi sistem persekutuan tidak musnah. Apa yang memuskilkan ialah jika seseorang yang tidak tahu mengenai Malaysia pada masa kini sudah tentu terpengaruh bahawa

Malaysia sudah musnah⁸. Ini adalah disebabkan Coral Bell tidak memberi penekanan maklumat masa kini. Ini amatlah merbahaya. Maka itu seperti yang telah dibincangkan di atas bahawa buku ini di dalam membincangkan mengenai krisis dunia dan PBB, terdapat sesuatu yang tersirat.

BAB 2 : "THE FALL AND RISE OF THE UNITED NATIONS"

Bab ini juga ditulis oleh penyuntingnya mengenai kejatuhan dan peningkatan PBB. Mengikut Coral Bell, sejak tercetusnya "iron curtain" pada tahun 1946 di Blok Timur dan strategi Amerika Syarikat (AS) iaitu strategi "containment" mulalah kebergunaan PBB dipertikaikan. Beliau mengatakan keputusan untuk menangani krisis dunia ini bukan dilakukan oleh PBB tetapi oleh kuasa-kuasa besar seperti AS, Uni-Soviet dan China. Mereka ini mempunyai kuasa pemutus atau "veto" dalam Majlis Keselamatan PBB (kuasa-kuasa yang menang Perang Dunia Kedua). Oleh itu dengan kuasa pemutus yang ada di tangan mereka PBB menjadi lemah dan tidak berkesan. Hanya pada tahun 1991 baru mula nampak PBB dapat memainkan peranannya semula.

Kekuatan bab ini terletak di atas keupayaan Coral Bell memberi gambaran yang terperinci mengenai jatuh dan naiknya PBB. Namun demikian dalam memperkatakan kejatuhan dan kebangkitan PBB, beliau telah menyimpang daripada tradisi penulisan akademik yang perlu berkecuali tanpa memihak atau berat sebelah kepada sahabat, rakan atau sekutu. Sebagai contoh, apabila beliau membincangkan mengenai ahli Majlis Keselamatan PBB yang mempunyai kuasa pemutus, semuanya mempunyai senjata nuklear. Katanya senjata nuklear bukanlah alasan untuk berkuasa. Negara-negara lain pun boleh diberi kuasa tersebut.

6. Sebagai contoh Uni-Soviet berpecah menjadi beberapa negara berdaulat cuba mengamalkan demokrasi mutlak dan keadaan mereka tidak stabil kerana ekonomi mereka yang masih di tahap lama. Untuk maklumat lanjut sila lihat Richard Shultz, Roy Godson & Ted Greenwood, (Eds.), *Security Studies for the 1990s*, Brassey's (UK), New York & London, 1993, hal 275.

7. Untuk mendapat maklumat lanjut mengenai teori 'incrementalism' dan teori-teori dasar awam lain sila rujuk kepada Thomas R. Dye, *Understanding of Public Policy*, Prentice Hall Inc., Eaglewood Cliffs, N. Jersey, 1978.

8. Prof. Shamsul (seorang ahli antropologist sosial) sendiri telah secara langsung terlibat di dalam perdebatan dengan pemberita Australia yang mana telah memetik maklumat lama. Beliau telah menerangkan di dalam artikel bertajuk "Australian Journalist's report based on old news from Asiaweek" dalam *The New Straits Times*, bertarikh 19 April, 1995.

Disamping itu percambahan senjata nuklear perlu diberhentikan. Namun disamping mengesyorkan percambahan dihentikan; beliau berkata "*Of course, countries which see themselves as desperately vulnerable, like Israel, will probably still push for an independent nuclear strike capability but luckily, that incentive is only present for a very small minority of the society of state*". Ini melambangkan bahawa penulisnya tidak menunjukkan keadilan. Masyarakat dunia tahu bahawa di rantau Asia Barat negara yang mula-mula memiliki senjata nuklear ialah Israel. Tetapi ini bukan persoalannya, yang penting ialah betapa bahayanya senjata tersebut yang perlu diberi penekanan⁹. Jika mahu percambahan ini diberhentikan atau dikurangkan, Coral sepatutnya tidak membezakan negara yang terlibat. Semua negara terlibat perlu diambil kira dengan saksama barulah dikatakan adil¹⁰.

Seterusnya, Coral telah mengesyorkan supaya PBB sebagai pengurus utama krisis dunia perlu mencari sesuatu instrumen dan idea baru untuk menguruskan krisis-krisis yang sedang dan akan berlaku di dunia ini. Tidak sepatutnya "*peace enforcement*" hanya dijadikan sebagai memanjangkan tugas misi "*peacekeeping*" sahaja. Sepatutnya kata Coral "*peace enforcement*" perlu diberi perhatian dan penekanan supaya dapat mengelakkan negara-negara yang bermasalah menggunakan kuasa tentera untuk menyelesaikan krisis mereka hingga mengakibatkan beribu-ribu mangsa terkorban¹¹. Namun Coral cuba mengenyahkan bahawa PBB pernah memberi laluan kepada sistem "*peace enforcement*" ini pada masa-masa yang lepas. Sebagai contoh peperangan di Korea adalah di bawah panji-panji PBB dan krisis Iraq-Kuwait juga ditamatkan dengan menggunakan pendekatan yang sama.

Walaupun PBB cuba disyorkan olehnya untuk mempunyai tentera pengaman sendiri yang akan

menimbulkan berbagai masalah seperti perintah, kelengkapan dan pembiayaan, kenapa tidak ditonjolkan kejayaan-kejayaan masa lalu? Inilah yang menjadi masalah utama kerana negara-negara yang kuat seperti AS yang cuba menjadi Polis dunia tidak ikhlas di dalam tanggungjawab kepada keamanan dunia. Ini adalah disebabkan AS masih memikirkan kepentingannya dan sekutunya sahaja. Oleh itu apabila memperkatakan keberkesanan PBB yang menurun, fakta seperti inilah sepatutnya diberi penekanan. Alasan yang memperkatakan bahawa anggota tentera yang terkorban semasa bertugas sebagai pasukan "*peace enforcement*" yang akan dipersoalkan oleh masyarakat negara terbabit (contohnya masyarakat AS), bukanlah menjadi halangan negara kuat untuk tidak melibatkan diri di dalam tugas keamanan dunia. Ini telah dibuktikan semasa "Operation Desert Storm" di Iraq¹². Dengan teknologi canggih dan penggunaan satelit yang maksimum, jiwa yang terkorban hampir tidak ada. Ini bermakna teknologi canggih boleh menyelamatkan jiwa anggota tentera. Oleh itu, jelaslah bahawa masalah jiwa tentera terkorban di medan pertempuran bukanlah isunya. Apa yang menjadi masalah masyarakat Barat seperti Coral Bell, melihat masalah krisis dunia dari sudut kepentingan Barat sahaja.

Seterusnya Coral membincangkan dengan begitu menarik tugas pengurusan krisis melalui diplomasi pencegahan (*preventive diplomacy*). Ia juga telah memberi penekanan bahawa negara-negara yang berdaulat melalui persekutuan tidak semestinya kekal sebagai satu negara. Sebagai contoh bekas Uni-Soviet telah berpecah menjadi beberapa negara yang berdaulat, sama jugalah dengan bekas Yugoslavia dan Czechoslovakia. Namun ia telah mempertikaikan kenapa Ukraine selama tiga abad bernaung di bawah Russia telah dapat kemerdekaan, sebaliknya rakyat Kurdish tidak diberi peluang yang sama? Negara-negara yang baru merdeka telah diberi hak untuk mentadbir negara mereka melalui hak kedaulatannya sejajar dengan fasal 2(7) kepada carta PBB. Mengikut Coral "*so the old principle that sovereignty belongs to those who can successfully assert it in arms might*

9. Apa akan terjadi jika senjata nuklear diletupkan dengan tidak sengaja? Inilah yang ditakuti. Untuk maklumat lanjut sila rujuk kepada Daniel Frei "Escalation: Assessing the Risk Unintentional Nuclear War", di dalam buku Daniel Frei, Ed., *Managing International Crises*, Sage Publications, London, 1982, hal 97-111.

10. Coral Bell, Ed., *Op. Cit.*, hal 16.

11. *Ibid.*, hal 18.

12. R. A. Mason "The Air War in the Gulf", di dalam makalah *Survival*, Vol. XXXIII, no. 3 May/June, 1991, hal. 221-229.

proven to be the relevant one"¹³. Oleh itu mereka berhak mempunyai tentera mereka sendiri. Namun di bekas Yugoslavia apabila krisis berlaku negara-negara yang telah diiktiraf oleh PBB sebagai negara berdaulat telah disekat membeli senjata dan kelengkapan perang sendiri atas dasar sekatan yang dikenakan pada keseluruhan bekas Yugoslavia. Kemudian krisis di Yugoslavia ini dianggap sebagai krisis "*civil disorder*". Ini adalah menghairankan kerana negara-negara yang terlibat sebenarnya telah diiktirafkan sebagai negara-negara berdaulat oleh PBB seperti Croatia dan Bosnia.

Seterusnya Coral telah menonjolkan kebangkitan keberkesanan PBB di dalam menangani krisis dunia. Beliau telah menghujah bahawa PBB dan negara-negara lain terutama Australia telah memainkan peranan yang penting menyelesaikan krisis di Cambodia¹⁴. Sekali lagi Coral cuba menjadi jurucakap kerajaan Australia dengan memberi penekanan pentingnya negaranya menjadi aktor utama dalam PBB (sebenarnya cuba melobi untuk menjadi anggota tetap Majlis Keselamatan PBB). Namun barang diingat beliau telah mengabaikan inisiatif dan dedikasi negara-negara ASEAN terhadap krisis Cambodia ini. Sebenarnya ASEAN telah cuba menangani masalah ini dari awal 1980an lagi. Ini adalah disebabkan mereka sedar masalah negara jiran perlu diselesaikan oleh jiran. Negara-negara luar, terutama Barat akan memainkan peranannya apabila kepentingannya tergugat sahaja. Sebagai contoh pada bulan Jun 1982 di Kuala Lumpur, ASEAN telah berjaya memanggil semua kumpulan yang menuntut seperti FUNCINPEC dan KPNLF (sebagai kumpulan bukan komunis) bekerjasama dengan Khmer Rouge (fahaman komunis) untuk sama-sama menubuh '*Coalition Government of Democratic Kampuchea*' (CGDK)¹⁵.

Di beberapa perenggan terakhir Coral telah meneliti bahawa terdapat banyak masalah apabila menggunakan tentera pengaman dari berbagai negara. Terutamanya apabila terdapat anggota tentera yang terkorban yang mana masyarakat negara akan menyual

kerajaan. Selain daripada itu masalah peruntukan kewangan pula terlalu banyak. Oleh itu persidangan PBB pada tahun 1993 telah mengesyorkan supaya PBB mempunyai "*crisis reaction force*" sendiri. Namun inisiatif ini mengikut Coral mendapat sambutan dingin kecuali ahli-ahli akademik.

Akhir sekali, Coral mengatakan bahawa negara-negara yang kuat sahaja boleh menyelesaikan krisis dunia. Negara-negara lain hanya boleh membantu. Apa yang terjadi sekarang kata Coral ialah PBB banyak bertindak menguruskan krisis-krisis tetapi tidak berupaya menyelesaikannya. Tetapi kalau kuasa yang bersatu dapat dilakukan dan mengatasi sekatan-sekatan yang sengaja dibuat maka banyak krisis dunia boleh diselesaikan.

BAB 3 : "THE UNITED NATION POWER TO INTERVENE IN THE DOMESTIC SPHERE : THE CHARTER AND POLITICS"

Bab ini ditulis oleh Gary Klintworth dan beliau telah meneliti dengan terperinci mengenai bagaimana undang-undang antarabangsa yang telah digubal oleh PBB boleh diinterpretasikan berlawanan dengan maksud awal undang-undang tersebut digubal. Beliau telah memberi penekanan bahawa PBB diberi kuasa untuk campurtangan dalam hal ehwal dalaman negara berdaulat. Inilah tema yang cuba ditonjolkan oleh Klintworth.

Apa yang menarik ialah kenapa tiba-tiba PBB telah diberi perhatian oleh negara-negara seluruh dunia terutama Barat dan ahli akademik? Kenapa semasa era Perang Dingin dahulu peranan PBB ini tidak diberi perhatian? Klintworth sendiri telah dengan ketara mengatakan "*As in the past, however, the occasions when the meaningful steps might be taken will depend least of all on altruism and very much on strategic, political and economic factors. Humanitarian considerations, while of increased importance, will still be subject to the overriding geopolitical interest of the permanent members of the UN Security Council and to the relative diplomatic and military clout*

13. Carol Bell, *Op. Cit.*, hal 21.

14. *Ibid.*, hal 22

15. Untuk mendapat maklumat lanjut inisiatif ASEAN sila rujuk kepada buku Kevin Clements & Robin Ward, *Building International Community*, Allen & Unwin, Canberra, 1994, hal 29.

of the target state and its critics"¹⁶.

Klinton telah memberi penekanan bahawa masalah hak asasi manusia sebagai alasan yang kuat untuk campurtangan dalam hal ehwal domestik negara berdaulat. Beliau merujuk kepada salah satu matlamat PBB ialah mengekalkan hak asasi manusia. Kemudian dikaitkan pula dengan fasal 55 dan fasal 56 kepada piagam PBB. Kemudian beliau telah mengaitkan fasal 2(4) kepada piagam PBB yang mengatakan; *"All members shall refrain in their international relation from threat or use of force against the territorial integrity or political independence of any state or in any other manner inconsistent with the Purpose of the United Nations"*¹⁷.

Sesuai yang menghairankan ialah Klinton berkata fasal 2(4) ini menggunakan kekerasan adalah dibenarkan atau sekurang-kurangnya tidak disebut mengatakan tidak boleh, jika digunakan sebagai menegak matlamat dan tujuan Piagam PBB seperti menggalakkan dan mempertahankan hak asasi manusia. Jika diuraikan semula fasal 2(4) ini tidak ada tanda-tanda mengatakan kekerasan boleh digunakan. Inilah masalahnya, iaitu undang-undang yang digubal terlalu banyak interpretasinya yang kadang-kadang menguntungkan sebelah pihak sahaja.

Pada perenggan pertama dan di halaman 31 Klinton telah menyuarakan *"New World Order"* perlu ada selepas Perang Dingin ini. Sebenarnya ungkapan tersebut telah diutarakan sejak awal 1991 selepas tentera bersekutu yang dipimpin oleh AS menyerang Iraq. *"New World Order"* yang diutarakan oleh Klinton ini agak kabur. Ini adalah kerana mengikut Richard Falk, ungkapan ini telah lama ditolak oleh AS setelah mereka menghadapi kerumitan untuk menjadi Polis dunia. Kemudian ungkapan tersebut digunakan oleh negara-negara lain dan ahli-ahli akademik. Ada antara mereka memberi maksud bahawa orde baru *"unipolar"* yang menjadikan AS

sebagai pemimpin dunia; ada pula mengatakan dunia menjadi *"multipolar"* iaitu kuasa tentera dan kuasa politik telah bertukar kepada dasar ekonomi dan kewangan dan pengaruh diagihkan kepada Eropah, Jepun dan AS¹⁸.

Walaupun artikel ini mengatakan campurtangan dibenarkan di era masa kini demi menjaga hak asasi manusia, namun Klinton telah juga memberi pandangan negara lain terutama Asia yang pada keseluruhan mengatakan bahawa cara Barat ini masih belum boleh digunakan oleh masyarakat Asia. Mengikutnya; penerimaannya agak lembap kerana dibebani dengan berbagai alasan.

Namun demikian, Klinton sepatutnya memberi penekanan bahawa tidak ada manusia dilahirkan sama. Setiap individu ada perbezaan antara satu sama lain. Oleh itu samalah juga negara-negara berdaulat. Masalahnya Klinton seperti penulis-penulis Barat lain cuba mempromosi tamadun Barat. Beliau tidak sedar sebelum tamadun Barat, dunia telah pun melalui tamadun China, India, Parsi dan Islam. Beliau juga tidak menjelaskan kenapa campurtangan hal ehwal domestik negara berdaulat tidak dapat sambutan menyeluruh? Kenapa Barat sahaja yang bersetuju? Mesti sesuatu yang menggagalkan pandangan ini. Apa yang jelas ialah ketidakadilan di dalam menguatkuasakan undang-undang PBB ini. Inilah sebenarnya batu penghalang kepada idea tersebut. Barat selalunya mementingkan kepentingan mereka sahaja. Penyelesaian krisis dunia mereka lakukan dengan *"pick and choose"* dan tidak sama rata. Oleh itu piagam PBB digubal dengan terperinci tetapi negara-negara yang kuat telah mengamalkan *"pilih kasih"* di dalam menangani krisis dunia. Sebagai contoh ialah di Rwanda yang ramai menyoal kenapa *"preventive diplomacy"* tidak digunakan di negara tersebut?¹⁹ Kenapa PBB dan negara-negara Barat yang kuat tidak memasuki negara tersebut lebih awal?

18. Richard Falk, "In Search of a New World Order", di dalam makalah *Current History*, April, 1993, Vol. 92, No. 573, hal 147.

19. Teori ini adalah salah satu yang telah disyorkan oleh Boutros Boutros Ghali di dalam bukunya *"Agenda for Peace"*.

16. Ibid., hal 43.

17. Ibid., hal 28.

Kenapa setelah pembunuhan beramai-ramai barulah beria-ia benar hendak menyelamatkan atas alasan "humanitarian ground"? Inilah yang dikatakan "double standard". Jika di Iraq semua negara Barat dapat bersekongkol untuk dengan pantas memusnahkannya, kenapa di Bosnia Herzegovina mereka dan PBB menggunakan resolusi 770 berpanduan "all necessary measures" sahaja?

Oleh yang demikian untuk memperkuat artikel ini Klintworth perlu mengambil jalan tengah dan tidak berpihak. Selain daripada itu perbincangan hak asasi manusia perlu dibincangkan dengan lebih luas dengan tidak mengambil pendekatan yang sempit. Contohnya, jika sesebuah negara itu miskin rakyatnya dibiarkan kebuluran. Tidakkah ini namanya melanggar hak asasi manusia kerana negara-negara maju tidak menolongnya? Adakah demokrasi lebih penting dari perut yang lapar? Kenapa tidak dibantu pertingkatkan ekonomi negara-negara berkenaan dahulu dan menggalakkan kerajaan yang kuat memerintah sebelum difikirkan konsep asing demokrasi dan hak asasi manusia? Oleh itu campurtangan yang lebih bermanfaat patut digalakkan. Sepatutnya penyelesaian hak asasi manusia perlu ditangani melalui akar umbi dan bukan secara "reaktif". Iaitu apabila timbul masalah barulah dunia mahu bertindak.

Oleh itu pandangan Gareth Evans yang dipetik oleh Klintworth di halaman 42 boleh dipertikaikan dan dukacita diperkatakan ia berbau "Western ethnocentrism". Apa yang boleh dicungkil dari penulisan ini ialah keadilan dunia hanya dilihat dari kepentingan Barat. Ini bermaksud "If you want justice, follow our system". Maka itu ungkapan yang terdapat di perenggan terakhir tulisan Klintworth akan terus kekal dalam politik antarabangsa.

BAB 4 : "THE PREPARATION AND MANAGEMENT OF AUSTRALIAN CONTINGENTS IN UN PEACEKEEPING OPERATIONS"

Perancangan dan persiapan untuk menguruskan

pasukan tempur tentera dalam operasi pengaman PBB lebih kurang sama juga dengan persiapan untuk berperang. Perbezaannya hanyalah isi padunya sedikit kecil atau ringan daripada persiapan untuk berperang. Ini kerana pasukan pengaman PBB dilengkapi secara ringan. Pasukan ini tidak perlu membawa senjata berat dan pesawat tempur canggih. Lazimnya, ia hanya memerlukan senjata ringan, perlindungan (seperti kereta perisai), pesawat helikopter dan lain-lain yang berkaitan. Namun tidak dapat disangkal persiapannya juga berat dan terpaksa menghadapi pengurusan krisis yang tersendiri.

Dalam bab ini Captain Russel Swinnerton telah menyingkap semula bagaimana tentera Australia menghadapi dan merancang operasi pengaman PBB. Selain daripada itu bagaimana mereka menghadapi peringkat-peringkat masalah pengurusan PBB kerana organisasi tersebut ialah organisasi politik dan bukan Markas Tentera. Oleh yang demikian masalah antara politik dan keperluan tentera boleh melembapkan pengurusan pasukan pengaman itu sendiri.

Sistem politik Australia tidak banyak bezanya dengan Malaysia. Penglibatan tentera pengaman sama sahaja memerlukan kelulusan kerajaan. Seperti juga Malaysia, Australia juga pada awalnya tidak mempunyai wakil tentera di PBB. Kemudiannya barulah Australia, Malaysia dan negara yang terlibat mempunyai wakil tentera di PBB. Ini memudahkan pengurusan penghantaran pasukan pengaman PBB.

Jika seseorang pegawai tentera membaca artikel Russel ini tidak banyak yang boleh diambil sebagai bahan atau idea untuk digunakan dalam pengurusan pasukan pengaman PBB. Ini kerana apa yang diperkatakan sama sahaja dengan apa yang dilakukan oleh Malaysia. Australia, mengikut Russel merupakan negara penyumbang yang ke-45 terbesar pasukan pengaman PBB, setakat penglibatan mereka di Somalia dahulu. Dalam mereka memperjuangkan keamanan dunia dan hak asasi manusia, sumbangan mereka tidaklah sehebat mana. Malaysia negara kerdil dan tidak begitu hebat dari segi perjuangannya, telah menyumbang tentera pengaman lebih ramai daripada Australia. Semasa Malaysia terlibat di Somalia, jumlah kekuatan penglibatan tentera ialah yang ke-19 terbesar.

BAB 5 : "UN PEACEKEEPING IN THE COLD WAR DECADES AND THE TRANSITION PERIOD, 1956 - 1989"

Artikel ini telah ditulis oleh Norman Macqueen yang membincangkan mengenai Pasukan Pengaman PBB dalam dekad Perang Dingin dan seterusnya memberi pandangan prospek masa hadapan PBB dalam dekad 1990an. Perbincangannya ringkas dan melalui peringkat-peringkat perkembangan penglibatan pasukan pengaman PBB sejak tahun 1956. Sebenarnya, sebelum ini pun PBB telah terlibat di dalam penyelesaian dan pengurusan konflik dunia. Namun beliau telah memberi tumpuan semasa Perang Dingin sahaja. Beliau berkata tumpuan penyelesaian konflik pada masa itu sentiasa berkait rapat dengan percaturan adi-kuasa untuk mengekalkan atau memperluaskan pengaruh di kawasan-kawasan berkonflik.

Apabila Uni-Soviet berpecah, barulah (terutama dalam dekad 1990an) konflik-konflik dunia tidak melibatkan "superpowers rivalries". Tetapi agak mengecewakan apabila beliau membincang negara-negara yang telah memberi sumbangan terutamanya operasi di Congo 1960 - 1964 ONUC (singkatan dari Bahasa Perancis), negara Malaysia yang juga memberi sumbangan tidak langsung dikaitkan. Mungkin Norman mempunyai sesuatu yang tersirat untuk mengeluarkan nama Malaysia di dalam perbincangan kerana mungkin Malaysia tidak penting untuk memperkuat perbincangannya. Namun yang hairannya negara seperti Indonesia, Ghana, Senegal dan Iran didedahkan penglibatan mereka²⁰.

Seterusnya, Norman juga dengan tepat mengatakan setiap operasi pengaman PBB ini pada satu ketika hanya dianggotai oleh negara-negara Barat atau negara-negara bukan komunis sahaja. Di akhir-akhir 1980an barulah banyak bekas pakatan Warsaw yang turut terlibat.

Walaupun penglibatan PBB di dalam pengurusan konflik antarabangsa ini telah dibincangkan dengan teliti oleh Norman, namun yang mengecewakan hanya cara 'penglibatan' itu dititikberatkan. Kelemahan artikel ini ialah ia tidak membincangkan kejayaan dan kegagalan PBB secara terperinci. Jika perkara ini dibincangkan, maka tulisannya akan menjadi lebih mantap dan boleh dijadikan sebagai bahan rujukan untuk membetul atau memperkemas operasi-operasi masa akan datang. Cara penulisannya agak ringkas, apa yang perlu hanyalah kita buka Kembaran II (Appendix II) kepada buku ini dan menghuraikan dengan terperinci dan terpujalah kepada kita apa yang perlu kita 'highlight'.

BAB 6 : "CAMBODIA : AN EARLY RETROSPECT"

Bab ini telah ditulis oleh Shirley Lithgow yang cuba mengenang kembali krisis yang melanda Cambodia, sehinggalah krisis tersebut selesai. Beliau secara sadar atau tidak telah menonjolkan penglibatan Australia sebagai aktor utama dalam usaha PBB mengembalikan keamanan di negara tersebut.

Apa yang menarik, jika kita membaca artikel Shirley bertajuk "Cambodia" di dalam buku *Building International Community* yang disunting oleh Kevin Clements dan Robin Ward, kita akan memahami dengan jelas dan lebih terperinci²¹. Berbanding dengan artikel yang hendak dikritik ini, sebenarnya ia telah disunting dengan rakus sehingga menjadikannya terlalu ringkas. Kita tidak boleh salahkan Shirley kerana penyuntingan bukan dilakukan olehnya sendiri. Jika kita mahu maklumat yang terperinci dalam penulisan Shirley kita boleh membaca artikel "Cambodia" kerana artikel "Cambodia : An Early Retrospect" adalah cedokan dan suntingannya sendiri.

Namun suntingan yang dilakukan oleh Carol Bell ini agak keterlaluan dan cuba mengeneipkan peristiwa-peristiwa penting yang telah dimainkan oleh negara-negara individu ASEAN. Sebagai contoh di

20. Perbincangan ini dapat dilihat di hal 71 kepada artikel tersebut di dalam buku Coral Bell, Ed., *Op.Cit* hal 71.

21. Kevin Clements & Robin Ward, *Op. Cit.*, hal 27-57

halaman 87 ayat pertama, "CGDK telah ditubuhkan tanpa mengetahui di mana mesyuarat tersebut dilakukan dan inisiatif negara manakah yang mengambil peranan aktif?" Sebenarnya ini adalah inisiatif ASEAN dan Kuala Lumpur yang telah menawarkan diri untuk mesyuarat dan pengumuman itu dilakukan di ibu negara Malaysia.²²

Selepas tajuk kecil, "The Australia Proposal" di halaman 89, banyak peristiwa positif yang telah membawa kepada persetujuan dan perdamaian Cambodia yang tidak diendahkan oleh Coral Bell. Sebagai contoh, JIM (*Jakarta Informal Meeting*) telah diadakan di Jakarta pada 26-28 Februari 1990 yang telah dipengerusikan oleh Ali Alatas, Menteri Luar Indonesia; pada 9-10 September 1990 Cambodia telah menerima cadangan rangka kerja ahli tetap Majlis Keselamatan PBB, untuk menubuhkan "Supreme Nation Security Council". Pada 9-10 November 1990, persetujuan telah dicapai di Jakarta untuk merangka struktur perdamaian komprehensif dan peristiwa-peristiwa lain yang menjurus kepada tamatnya sengketa dan perdamaian dicapai.²³

Semua peristiwa ini penting, malangnya Coral Bell tidak memberi penekanan kepada inisiatif yang dimainkan oleh negara-negara ASEAN, dan sebaliknya telah menonjolkan peranan Australia, seolah-olah tanpanya Cambodia tidak mungkin mencapai kedamaian. Oleh itu penyuntingan yang agak 'nakal'

ini dapat melambangkan bagaimana Barat memutar-belit peristiwa-peristiwa yang berlaku demi untuk kepentingan mereka. Dalam konteks ini, penyunting cuba mengiklankan betapa Australia memainkan peranan untuk kesejahteraan rantau ini. Kononnya tanpa keaktifan mereka rantau ini tidak akan menikmati kesejahteraan.

ULASAN

Oleh yang demikian seperti yang telah dimaklumkan terlebih dahulu, apabila membaca buku ini kita perlu berhati-hati supaya tidak terjebak dengan kenakalan Barat yang sering memperkecilkan negara-negara Dunia Ketiga. Kita perlu lebih kritikal apabila membaca buku seperti ini kerana kadang-kadang si penyumbang artikel tidak ada kuasa untuk menyekat penyunting dari memutar-belitkan bahan tulen demi untuk kepentingan sendiri.

Kritikan ini bukanlah diambil dari sudut yang sempit tetapi cuba meninjau dari sudut yang lebih positif. Penghormatan patut diberi kepada buku ini terutama Coral Bell yang telah begitu teliti di dalam penyuntingannya. Hanya apa yang patut kita luahkan ialah sekurang-kurangnya dapat menyedarkan bahawa bukan semua pandangan kita itu boleh diterima oleh semua orang.

22. Ibid., hal 29.

23. Ibid., hal 33-35.



Lt Kol Naharuddin bin Shaari ditauliahkan ke Rejimen Renjer Diraja pada 25 Apr 1974. Telah menghadiri Maktab Turus Angkatan Tentera pada tahun 1989. Memperolehi Diploma Pengajian Strategi dan Keselamatan pada tahun 1986/87 dan Diploma Lanjutan Pengajian Strategi dan Keselamatan pada tahun 1994/95 di UKM, Bangi. Beliau pernah bertugas sebagai Pegawai Staf dan Jurulatih di PULADA dan Maktab Tentera Diraja serta sebagai PS 2 Latih di MK Latihan TD. Kini menjawat sebagai Pegawai Memerintah 5 RRD.

PENTINGNYA MOTIVASI DALAM KETENTERAAN

oleh :

Mej Joseph Rajah Raghavan

PENDAHULUAN

Keberkesanan pengurusan merupakan aspek utama yang dapat menentukan pencapaian objektif atau sasaran sesebuah organisasi. Pengurusan yang dimaksudkan di sini merangkumi pengurusan anggota dan material. Bagi seorang pemimpin tentera pula, selain daripada material, pengurusan sumber manusia merupakan tanggungjawab utama kerana keanggotaan atau sumber manusia merupakan aset yang paling bernilai.

Seseorang pemimpin tentera mempunyai tanggungjawab yang berat untuk membimbing, mendorong serta memimpin aset ini, demi mencapai sasaran organisasi. Dalam hal yang demikian, kebolehan seseorang pemimpin untuk mendorong, mempengaruhi, mengarah serta berkomunikasi dengan anggota bawahannya akan sedikit sebanyak menentukan keberkesanannya sebagai seorang pemimpin.

Seorang anggota akan dapat menghasilkan kerja yang optimum apabila dia bermotivasi dan mempunyai semangat atau 'morale' yang tinggi. Oleh yang demikian, dalam menguruskan sumber manusia, adalah menjadi tanggungjawab setiap pemimpin untuk menentukan anggotanya bermotivasi tinggi pada setiap masa. Seseorang pemimpin akan dianggap tidak dapat memimpin dengan berkesan jika anggota bawahannya tidak bermotivasi.

TEORI MOTIVASI

Motivasi dapatlah dirumuskan sebagai faktor-faktor atau tindakan yang menyebabkan, menyalurkan serta menahan kelakuan seseorang individu. Pada

dasarnya, ia adalah penggerak dalaman (internal drive) dan kesanggupan seseorang anggota bawahannya untuk berusaha demi mencapai sasaran atau matlamat organisasinya. Seseorang pemimpin boleh memotivasikan anggota bawahannya dengan mewujudkan suasana kerja secara mengasuh dan mendidik supaya pekerjaan itu membawa kepuasan diri dan pada masa yang sama, mendorongnya berusaha lebih demi kebaikan organisasinya. Dalam pada itu, suasana kerja mestilah menimbulkan perasaan kekitaan (sense of belonging) di mana setiap individu dalam organisasi tersebut dianggap penting.

Terdapat banyak teori dan pendekatan kepada motivasi yang digunakan dalam dunia korporat. Walaupun pendekatan-pendekatan atau teori-teori ini digubal untuk kegunaan dunia korporat, namun ada di antara pendekatan dan teori ini yang dapat digunakan dalam tentera. Di antara pendekatan-pendekatan ini, terdapat tiga pendekatan yang boleh dibincangkan. Pendekatan-pendekatan yang dimaksudkan adalah seperti berikut:

- * **Pendekatan Secara Tradisional.** Pendekatan ini ada hubungkait dengan pandangan Fredrick Taylor, seorang Pakar Pengurusan. Dalam pendekatan ini, seorang pengurus akan menentukan bagaimana sesuatu kerja itu harus dilaksanakan dengan menggunakan sistem ganjaran untuk memotivasikan pekerjaannya. Dalam ertikata lain, ganjaran yang diterima oleh seseorang pekerja bergantung kepada usaha seseorang individu tersebut. Lebih banyak usaha seseorang individu itu, maka tinggilah ganjaran yang diterima. Dengan hal yang demikian, seseorang pekerja dimotivasikan semata-mata dengan hadiah dalam bentuk kewangan. Jika motivasi ini dibandingkan dengan sistem motivasi dalam

tentera, maka ia bolehlah diibaratkan sebagai Sistem Saraan Baru (SSB) yang dipraktikkan ketika ini. Dalam SSB, seseorang anggota itu akan mendapat ganjaran kewangan berupa bonus dan kenaikan gaji jika prestasi yang ditunjukkan cemerlang. Namun demikian, cara motivasi ini mempunyai kelemahan-kelemahannya sendiri di mana anggota menerima penganugerahan tersebut hanya 5 peratus sahaja. Oleh yang demikian, pendekatan motivasi tradisional dengan menggunakan kewangan sebagai ganjaran mungkin juga mempunyai kesan-kesan negatif kerana ramai anggota yang menunjukkan prestasi yang boleh dibanggakan tidak diberi penganugerahan tersebut disebabkan had 5 peratus yang dikenakan.

*** Pendekatan Perhubungan Manusia.**

Pendekatan Tradisi yang dibincangkan sebelum ini dianggap kurang lengkap oleh beberapa pakar pengurusan. Elton Mayo, seorang penyelidik dalam bidang Perhubungan Manusia berpendapat bahawa perhubungan sosial di kalangan anggota juga mustahak dalam motivasi. Pendapat ini mencadangkan bahawa seseorang pengurus boleh memotivasikan anggota bawahannya dengan memberi penghargaan kepada perhubungan sosial mereka dengan menganggap mereka berguna dan penting kepada organisasi. Dengan pendekatan ini walaupun sasaran atau objektif ditetapkan oleh pihak pengurusan, anggota bawahan terutamanya pemimpin rendah diberi kebebasan mengambil keputusan dan merancang. Pendekatan ini juga boleh diamalkan dalam tentera. Sistem Mesyuarat Kebajikan dan sesi dialog yang diadakan di pasukan sebenarnya mempraktikkan pendekatan ini.

*** Pendekatan Sumber Manusia.**

Selain daripada pendekatan-pendekatan yang dibincangkan, terdapat juga pendekatan yang lain iaitu Pendekatan Sumber Manusia. Pendekatan ini dirumuskan oleh Pakar Teori Pengurusan seperti Douglas Macgregor dan Abraham Maslow. Mengikut pendekatan ini, motivasi bukan bermakna memberi penghargaan dalam

perhatian kepada keperluan seseorang itu tetapi pihak pengurusan mestilah sama-sama memikul tanggungjawab untuk memenuhi objektif atau mencapai sasaran organisasinya. Dengan hal yang demikian, semua peringkat dalam organisasi tersebut akan sama-sama memberi sumbangan untuk mencapai sasaran organisasi berdasarkan kemampuan masing-masing. Yang dititikberatkan dalam aspek ini adalah kepuasan yang diperolehi oleh setiap individu dan memahami sumbangan masing-masing. Pendekatan ini lebih berguna kepada pekerja yang bermotivasi tetapi inginkan kepuasan peribadi (personal satisfaction) dan rasa pencapaian (sense of achievement). Dalam suasana tentera, cara ini juga dititikberatkan dengan adanya sistem TQM (Total Quality Management). Projek-projek TQM yang dilaksanakan serta Tim Meningkatkan Kerja (TMK) yang diadakan juga secara tidak langsung mengikut pendekatan ini.

Dalam melaksanakan mana-mana teori motivasi, tiga ciri berikut harus diambil perhatian:

*** Ciri-ciri Individu.** Ciri ini merangkumi minat, sikap dan keperluan seseorang individu dalam suasana kerja. Setiap individu akan mempunyai ciri yang berlainan dan cara motivasi juga berbeza. Sebagai contoh, seseorang individu yang memerlukan kemegahan atau martabat akan lebih mementingkan jawatan dan tanggungjawabnya, manakala seseorang yang mementingkan ganjaran dalam bentuk wang akan bermotivasi jika ganjaran wang yang diterima itu lebih.

*** Ciri-ciri Pekerjaan.** Ciri-ciri ini merangkumi spesifikasi kerja, tanggungjawab dan kepuasan yang seseorang individu itu perolehi dari pekerjaan tersebut. Sesuatu pekerjaan yang memberi kepuasan adalah lebih bermotivasi dengan yang tidak.

*** Ciri-ciri Situasi Kerja.** Ciri-ciri ini adalah suasana kerja seseorang individu. Suasana di sini merangkumi harapan pihak

pengurusan, adat organisasi tersebut serta sistem ganjaran dan penilaian yang dipraktikkan.

PETUNJUK ANGGOTA TIDAK BERMOTIVASI

Dalam suasana tentera yang bergantung kepada sumber manusia untuk mencapai objektif organisasi, anggota-anggota yang bermotivasi adalah penting. Apabila seseorang individu tidak bermotivasi, akibat yang paling ketara adalah kelemahan 'morale'.

'Morale' di sini bolehlah dianggap sebagai keadaan mental dan emosi seseorang individu atau kumpulan merangkumi kesetiaan dan minat terhadap semua perkara yang mustahak kepadanya atau kumpulan tersebut. 'Morale' ini tidak tetap dan akan naik atau turun mengikut keadaan. Ia ada hubungkait dengan kecekapan (efficiency) dan respon atau reaksi mereka kepada arahan dan perintah.

Kelemahan 'morale' boleh dikesan melalui beberapa petunjuk. Seorang pemimpin tentera mestilah sentiasa peka terhadap petunjuk-petunjuk ini supaya ia boleh dikesan dengan serta-merta.

Di antara petunjuk yang boleh dikesan adalah seperti berikut:

- * Anggota yang gelisah dan resah.
- * Anggota yang tidak rasional.
- * Sikap yang negatif.
- * Kesilapan yang kerap.
- * Tiada kerjasama.
- * Kurang minat dalam pekerjaan.
- * Sungutan yang kian bertambah.
- * Ketidakhadiran tanpa cuti yang kerap.
- * Disiplin yang merosot.

SEBAB-SEBAB ANGGOTA TIDAK BERMOTIVASI

Ada banyak sebab yang boleh mengakibatkan seseorang anggota tentera tidak bermotivasi dan seterusnya mengakibatkan kelemahan 'morale'. Di antara sebab yang dikenalpasti adalah seperti berikut:

* **Ketiadaan Taksiran Kerja (Performance Appraisal).** Seseorang pemimpin mestilah mengadakan taksiran kerja sekurang-kurangnya sekali dalam setahun. Sekiranya taksiran ini tidak diadakan, anggota bawahan akan bekerja tanpa sasaran atau haluan. Ini boleh sedikit sebanyak menyebabkan wujudnya suasana tidak bermotivasi.

* **Arahan dan Polisi Yang Sentiasa Berubah.** Semua arahan dan polisi yang dikeluarkan mestilah tetap dan tidak bertukar-tukar setiap kali pemimpin bertukar. Sekiranya sesuatu arahan atau polisi sentiasa berubah, maka ini akan menyebabkan kejatuhan 'morale' dan sungutan. Akibatnya adalah anggota tidak bermotivasi. Semua arahan atau polisi yang keluar adalah untuk memberi panduan kepada anggota bawahan. Arahan yang sentiasa bertukar akan menyebabkan hilangnya panduan atau haluan ini.

* **Diskriminasi dan 'Double Standard'.** Diskriminasi merupakan satu perkara yang selalu berlaku dalam mana-mana organisasi di mana ada di kalangan anggota dalam organisasi tersebut yang merasa bahawa mereka tertindas dan menjadi mangsa diskriminasi. Diskriminasi ini boleh terjadi atas dasar agama, bangsa, persaudaraan, tempat asal atau jantina. Walau apa sekalipun sebabnya, diskriminasi akan menyebabkan kejatuhan 'morale' di kalangan anggota dan seterusnya akan menyebabkan anggota tidak bermotivasi untuk bekerja.

* **Tiada Jaminan Masa Depan.** Sekiranya seseorang itu tidak mempunyai jaminan masa depan dalam kerjayanya, ia akan secara langsung

menyebabkan anggota itu tidak bermotivasi dan seterusnya hilang minat dalam kerjayanya. Jaminan masa depan di sini bukanlah sahaja jaminan kerja tetapi juga kemajuan atau peningkatan dalam kerjayanya dari segi kenaikan pangkat dan kursus. Perancangan kerjaya anggota bawahan adalah salah satu daripada tanggungjawab seorang pemimpin. Tanpa perancangan kerjaya anggota bawahan akan hilang keyakinan akan masa depannya dalam organisasi tersebut.

*** Gaji atau Ganjaran Yang Tidak Setimpal.** Perkara ini merupakan satu masalah dalam tentera dewasa ini. Memandangkan ekonomi negara pada ketika ini kian pesat, maka ramai di kalangan pegawai dan anggota tentera yang berpendapat bahawa gaji dan ganjaran yang diterima dalam tentera tidak seimbang dengan ganjaran yang diterima oleh orang awam yang bekerja di sektor korporat. Tambahan pula, ada arahan tertentu yang menghadkan seseorang anggota tentera daripada memohon untuk bersara secara awal dari perkhidmatan tentera terutama pegawai. Oleh yang demikian, anggota-anggota tersebut akan secara langsung tidak akan bermotivasi untuk bekerja dan akan 'hanyut mengikut arus' sehingga tiba masanya bersara.

*** Harapan Yang Terlalu Tinggi oleh Pemimpin Di Samping Kekurangan Sumber Manusia dan Material.** Kekurangan material dan anggota merupakan satu perkara yang biasa dalam organisasi tentera. Pegangan anggota pada tahap 60 ke 70 peratus adalah biasa dan tidak dapat dinafikan di mana-mana organisasi atau pertubuhan tentera. Tambahan pula, kekurangan material juga merupakan satu perkara yang biasa terutama sekali dari segi peralatan dan alat kelengkapan yang uzur dan serba kekurangan. Namun demikian, harapan pemimpin atasan dari segi pencapaian adalah masih lagi di tahap 100 peratus. Ini boleh menyebabkan anggota hilang semangat dan motivasi disebabkan mereka terpaksa berusaha lebih di samping kekurangan tanpa sebarang ganjaran.

*** Menyalahguna Sumber Manusia.** Adakalanya seorang anggota ditugaskan di dalam sesuatu jawatan tertentu pada hal beliau dilatih dalam bidang yang lain. Ini boleh menimbulkan perasaan tidak puas hati di mana anggota tersebut akan menganggap bahawa beliau tidak ditugaskan mengikut keupayaan atau kepakarannya.

*** Tiada Perhubungan Antara Ketua dan Anggota Bawahan.** Sekiranya seorang ketua tidak berhubung rapat dengan anggotanya, beliau juga boleh menyebabkan anggotanya tidak bermotivasi disebabkan penyaluran maklumat dari ketua kepada anggota bawahan akan terputus. Akibatnya, anggota bawahan akan hilang haluan.

*** Masalah Peribadi.** Seorang anggota yang mempunyai masalah peribadi yang mungkin menggugat motivasinya untuk bekerja. Masalahnya akan mengganggu tumpuan atau konsentrasinya semasa bekerja dan akan menyebabkan kejatuhan prestasinya.

LANGKAH-LANGKAH YANG BOLEH DIAMBIL

Untuk menentukan anggota-anggota sentiasa bermotivasi, beberapa langkah boleh diambil oleh seseorang pemimpin. Langkah-langkah ini jika dikaji sedikit sebanyak mengikut teori-teori atau pendekatan-pendekatan pakar pengurusan yang dibincangkan awal tadi. Walau bagaimanapun dari segi perlaksanaan, ia haruslah diubahsuaikan mengikut suasana tentera.

Di antara langkah-langkah tersebut adalah seperti berikut:

*** Pemimpin mestilah memotivasikan anggota bawahan secara aktif dan sengaja.** Dengan hal yang demikian anggota bawahan akan sedar bahawa pemimpin mereka mengambil berat tentang diri mereka.

* Pemimpin juga mestilah sedar bahawa setiap anggota bawahan adalah individu-individu yang berbeza. Oleh yang demikian cara motivasi yang digunakan mestilah berbeza, disebabkan mereka mempunyai keperluan dan kebolehan yang berlainan.

* Segala ganjaran yang diberi mestilah berpandukan kepada prestasi seseorang dan bukannya berdasarkan kekananan atau perkara-perkara lain yang tiada kaitan dengan prestasi seperti bangsa dan tempat asal.

* Pemimpin mestilah sentiasa berhubung rapat dengan anggota bawahan dan cuba mengatasi sebarang masalah apabila timbul tanpa melengahkan masa.

* Taksiran Prestasi (Performance Appraisal) mestilah diberi dari masa ke semasa.

* Arahan-arahan dan polisi biarlah tetap dengan perubahan yang minimum.

* Tentukan penyaluran maklumat diadakan supaya semua anggota faham apa tujuan dan tindakan pemimpin.

* Sesi-sesi dialog dan kaunseling mestilah sentiasa diadakan.

* Penyalahgunaan sumber manusia

mestilah dielakkan atau ditahap minimum.

* Segala harapan terhadap prestasi pihak atasan mestilah praktikal dan munasabah mengikut pegangan anggota dan material.

* Jangan sekali-kali mengamalkan diskriminasi atau 'double standard' untuk mengelakkan anggota tidak bermotivasi.

PENUTUP

Adalah nyata di sini bahawa 'Morale', Motivasi dan Prestasi Kerja mempunyai hubungkait antara satu dengan yang lain. Seorang pemimpin pada setiap peringkat mestilah memainkan peranan yang penting dalam memotivasikan anggota sebelum menganggap diri mereka sebagai seorang pemimpin yang berkesan.

Memandangkan elemen-elemen motivasi yang dibincangkan tadi merupakan 'intangible' dan tidak nampak maka seorang ketua mestilah sentiasa sedar dan peka kepada petunjuk-petunjuk (indicators) yang menunjukkan anggota tidak bermotivasi.

Sebarang tindakan yang diambil mestilah serta-merta sebelum masalah tersebut berlarutan serta merosot sehingga menjejaskan prestasi pasukan atau organisasi berkenaan.



Mejar Joseph Rajah Raghavan ditauliahkan pada 17 Jun 82 dalam Kor Armor Diraja. Di sepanjang perkhidmatan, beliau telah menghadiri semua kursus kerjaya sehingga ke Maktab Turus pada tahun 1994, serta Kursus Pemerintahan Pasukan pada tahun 1996. Beliau juga telah memegang beberapa jawatan penting selain daripada jawatan di pasukan. Di antara jawatan KLR adalah Jurulatih di Maktab Tentera Diraja dan Ketua Cawangan Taktik di PULAMOR. Ketika ini beliau memegang jawatan Ketua Bahagian Peperiksaan dan Kurikulum di PULAMOR.